

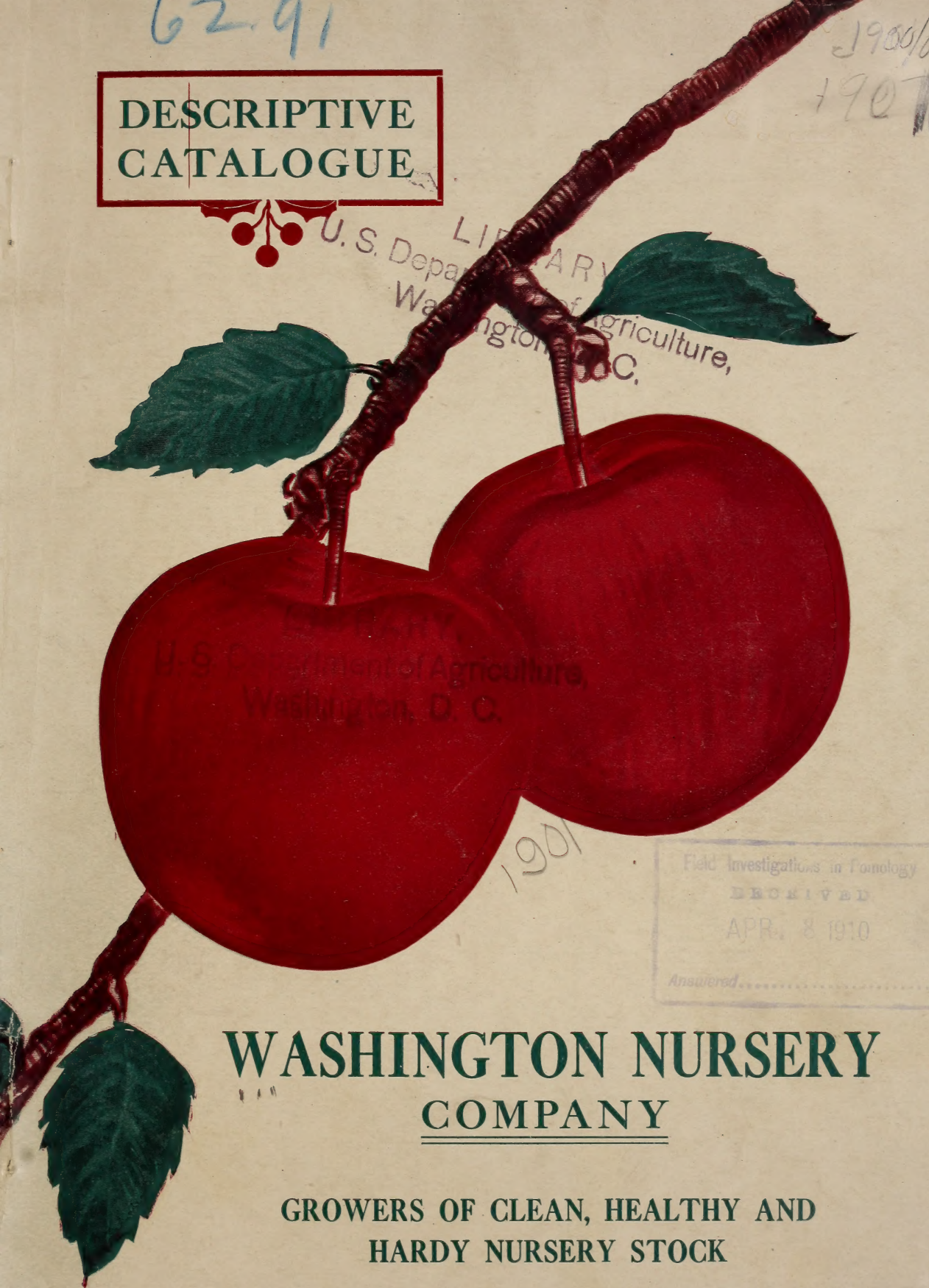
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Field Investigations in Pomology
RECEIVED
APR. 8 1910
Answered.....

WASHINGTON NURSERY
COMPANY

GROWERS OF CLEAN, HEALTHY AND
HARDY NURSERY STOCK

TOPPENISH : : : : WASHINGTON

(c 1900)

Complete Descriptive Catalogue of
**Fruit, Shade and
Ornamental Trees**

Grapes, Small Fruits, Roses
Shrubs, Climbing Vines, Etc



INCORPORATED 1903
Fourth Edition

WASHINGTON NURSERY CO.

TOPPENISH, WASHINGTON



AMONG
THE
PEACH
BUDS



ONE-
YEAR
APPLE
BUDS



ONE-
YEAR
APPLE
GRAFTS

Introduction

We are pleased to present another edition of our Catalogue to friends and patrons, old and new. Time and experience are excellent factors in demonstrating not only what to grow and sell, but how better to do both. The rapid increase in our business, and the size of our plant as compared with a few years since are ample evidence that the claims we make for the superiority of our stock are fully proven to the satisfaction of our large number of customers.

At this writing (June, 1909), we have maturing for fall and spring delivery over two and a quarter million staple fruit trees, besides a large stock of ornamentals and a heavy seedling plant for the season's budding, covering in all two hundred and fifty acres of land.

Descriptions herein are accurate, but allowance must be made for variations in time of maturing and ripening due to difference in elevation, climate, etc.

LOCATION—In former editions of our catalogue, we expressed faith in our choice of location for the propagation of nursery stock. Results have proven that we made no mistake, and today, with seven years' experience growing trees on the Yakima Indian Reservation, in the heart of the far-famed Yakima Valley, we can truthfully say that we believe there is no spot on the continent more favored for the production of clean, healthy, well-rooted trees. The Indian lands have been cultivated but a few years, nearly altogether under lease, mostly as hay and potato ranches, hence there are no old orchards or forest trees near by harboring pests or tree diseases.

NO PESTS—This fact will appeal alike to the commercial orchardist or the small planter, as it guarantees to both the clean stock to which they are entitled and which they should demand. However, as "eternal vigilance" counts in this business as in every other, we take no chances, but are properly equipped with spray outfits to forestall the encroachment of any form of contamination.

SOIL—The soil is a rich sandy loam, deep and well drained. Lying practically dormant for ages, it has stored in it all the essential elements for plant and wood growth, and the trees we grow here are ample proof of this fact.

CLIMATE—The climatic conditions are ideal. Mild winters, early springs, long growing seasons, no late rains to start a new growth of wood, and no damaging frosts till the wood fiber is thoroughly hardened, all combine to produce a well matured, tough, hardy tree that will stand transplanting under any of the varied conditions to be met with in any climate.

CULTIVATION—These advantages, together with thorough cultivation under the personal supervision of the management, based on long experience and a practical knowledge of tree and plant life, all result in the development on our trees of a splendid fibrous root system which has made them famous throughout the entire fruit planting section.

SYSTEM—Of utmost importance to our customers is the assurance that they will obtain varieties ordered. A visit to our nurseries will reveal the care with which we guard against error by a system in grafting, planting, budding, digging and shipping that is as near perfection as we can make it. All of this is the outgrowth of years of experience in the growing and handling of trees and in office management, our company being organized under three heads, as follows:

ORGANIZATION—Growing, selling and delivering departments are each in charge of a member of the company, an expert in his line. This insures to each and every customer that his trees will be properly handled and that his order will receive careful attention, also that he may depend upon receiving kind and quality of stock ordered. We keep an exact count of the total trees in each variety in our plant, aggregating the sales and checking off totals each week and when a variety runs low, we stop the sale. In this way we avoid overselling, and customers are assured of getting what they order.

INQUIRIES—All inquiries for stock are handled by our Sales Department, and every attention is given to written or personal requests for information, as we take pleasure in furthering the interests of the horticulturists of the country.

SALESMEN—We are represented by salesmen in almost all portions of the West, our

constant aim being to secure the services of honorable, experienced men. Customers are requested to write us of any misrepresentation on the part of any one claiming to be one of our salesmen, all of whom carry proper credentials, including a certificate of agency bearing our seal.

MAIL ORDERS—If our salesman fails to call on you, write us and we will gladly give you every assistance in making up your order.

PRICES—Prices are the same, whether you buy of us direct or through our salesmen.

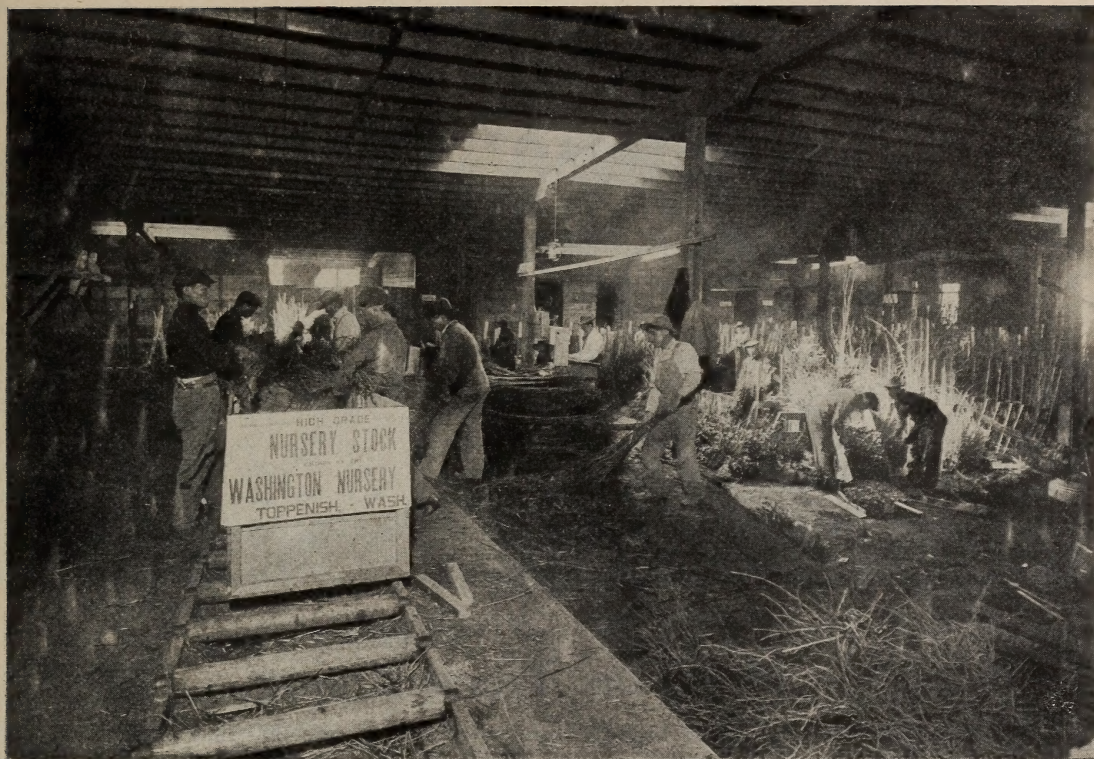
QUALITY—We are not unaware that you may occasionally be offered certain stock at slightly lower prices than ours, but when you consider that quality in trees is just as varied as in any other commodity, you will demand the best, regardless of a minor difference in price. Orchard lands are too valuable to be cumbered with trees of doubtful worth. A mere handful of fruit in the first year's crop pays the first cost of a good tree. Why risk a cheap one?

SELECTING STOCK—We have always contended, and results have sustained our contention, that one-year-old straight trees, with well-developed fibrous roots, are far the best to plant. We are gratified to observe that practically every horticulturist of note and all leading orchardists agree on this point.

YEARLINGS BEST—The advantages of the well-rooted yearling tree over its larger neighbor are easily understood. There is a much better balance between the root and top. In other words, the root is the foundation and the top is the superstructure, and a good foundation is absolutely necessary. In transplanting any tree or shrub, it is out of the question to attempt to save all the roots. In digging, a portion is cut off and in its new home time must be given for the roots to firmly establish themselves. The less top they have to support, the better for the tree, hence it is nothing uncommon for a one-year-old tree to overtake and outgrow a two-year-old planted at the same time. Furthermore, in these days of scientific orchard making, the practical man wants a tree that he can head at the proper height and "shape" to suit himself. With a tree already branched, he can do but little, while with the straight, clean body, he has full sway.

SAVING THE ROOTS—We cultivate incessantly and deeply to make the roots, and in digging set our patent digger at its lowest point, about eighteen inches below the surface, to get all we can of them, for we grow those roots to sell, not to keep. If the planter, therefore, uses due care, plants carefully, heads his trees properly and gives nature a chance, she will do her part and the immediate recuperation and growth of the transplanted tree will surprise him.





PORTION OF PACKING HOUSE.

Notice to Customers

1. Orders should be sent in as early as possible, that there may be plenty of time for shipping long distances when necessary.
2. Buyers, ordering by letter, should write out their order plainly, on a separate list, and not on the body of the letter. It will prevent mistakes in the hurry of the packing season.
3. Give plain and explicit shipping directions. When none are given, we forward according to our best judgment; but in no case do we assume any responsibility after the delivery of stock in good condition to the forwarder.
4. All orders from unknown correspondents must be accompanied with the cash or satisfactory references.
5. **In Making Selections of Stock**, ascertain as nearly as possible what varieties do best in your locality, and if planting commercially, inquire particularly what varieties attain their best perfection, stand handling and shipping, and bring good prices.
6. Immediate notice should be given to us of any error in filling out an order, so that we may at once rectify the mistake, or give a satisfactory explanation.
7. As we guarantee the freight on all shipments leaving our establishment, it will be necessary for unknown parties to remit the money with their orders. Orders to be sent by express, C. O. D., must be accompanied by at least one-half the amount in cash, otherwise they will receive no attention.

All communications to be addressed to

WASHINGTON NURSERY CO.,
Toppenish, Washington.



WEEDING AND CULTIVATING YOUNG GRAFTS.

Hints on Transplanting

IN TAKING YOUR TREES HOME from delivery point, see that they are not exposed to sun or wind. Many trees are injured more in an hour at this time than if one or two weeks in transit. Cover them well with straw, burlap or canvas, and immediately upon reaching home, heel them in, wetting and packing the ground thoroughly. Take only a few at a time out of the ground at planting time. A barrel or tub of water in which to keep the trees in the field while planting insures against needless exposure. A little extra care at this time will repay you ten-fold.

PREPARATION OF THE SOIL—Prepare a rich, deep bed of mellow soil, and have the land sufficiently drained to relieve the roots from standing water. To insure a fine growth, land should be in as good condition as is required for a crop of wheat, corn or potatoes.

PREPARATION OF TREES BEFORE PLANTING—We use great care in digging and packing, but the loss of some small roots and fibers is unavoidable. If stock is properly prepared before planting, no permanent injury will result from this, but in cases of branched or trees older than one year, the preservation of the natural balance between tops and roots renders a vigorous cutting of the former absolutely necessary in most cases. Therefore, prune off broken or bruised ends of roots, if any (a smooth-cut root granulates, or makes ready to extend, sooner than one broken off). Cut back the tops to the extent of about one-half the previous year's growth, taking care at all times to prune in such a manner as will tend to develop a well-formed head, sufficiently open to admit air and light freely. One-year-old trees, where there is but one straight stock, should be cut down to the height desired for forming the head.

PLANTING—Make the holes large enough to admit the roots without any cramping or bending, and deep enough to bring the tree to its natural depth. The fine surface soil should be used in covering the roots, and this should be carefully worked among them. It is well to pour in some water when the hole is partially filled. See that the ground is firmly and solidly packed over all parts of the roots, so that there will be no opportunity for dry air or frost to enter and destroy roots deprived of the full benefit of their natural protection. Omission to pack the earth solidly is a more frequent cause of failure in planting nursery stock than any other. Fill the holes full enough to be even with the surrounding surface after the fresh earth settles. Never use manure in contact with roots. Large standard trees should be staked and tied so that the wind will not loosen the roots.

PLANTING IN IRRIGATED DISTRICTS—Have the water in the field ditches and as you fill the hole with earth, run in water and let settle, finally filling and packing, and leaving a dry mulch of earth on top. In these arid and semi-arid localities ground should be kept in very moist condition. Many trees are lost through neglect of this important point.

MULCHING—When trees or bushes are planted, they should be mulched or covered with a layer of coarse manure or litter from three to six inches deep for a space of, say, two feet more in diameter than the extent of the roots. This keeps the earth moist and of even temperature.

AFTER-CULTURE—Grass should not be allowed to grow about young trees or plants. The ground should be cultivated for a space of at least one foot outside the roots. If the ground is poor it should be enriched with surface applications of manure. Pruning should be varied according to the condition of the tree, and the purpose of the planter. It should be done regularly every spring, before the buds swell any. In this way the removal of large branches will be avoided.

FALL PLANTING

We are opposed to fall planting of trees in most sections where the thermometer goes below zero, past experience having demonstrated to our satisfaction that trees delivered to customers in the fall are more or less injured during the freezing weather of winter—lowering their vitality and causing many to die the first summer after planting; and we will not deliver trees in the fall of the year in cold sections of the country except when the owner is willing to take all risk and pay freight from nursery.

INJURED TREES—If trees are received in a frozen state, place the package unopened in a cellar, away from frost and heat, until thawed out, and then unpack. If partially dried from long exposure, bury entirely in the ground, or place in water for from 12 to 24 hours.

DISTANCES FOR PLANTING

Standard Apples	30 feet apart each way
Standard Pears and strong growing Cherries.....	20 " " " "
Duke and Morello Cherries.....	18 " " " "
Standard Plums, Peaches, Apricots, Nectarines.....	16 to 18 " " " "
Dwarf Pears	10 to 12 " " " "
Dwarf Apples	10 to 12 " " " "
Quinces	10 to 12 " " " "
Grapes	rows 10 to 16 feet apart; 7 to 16 feet in rows
Currants and Gooseberries.....	4 feet apart
Raspberries and Blackberries.....	3 to 4 by 5 to 7 feet
Strawberries for field culture.....	1 by 3 to 3½ feet
Strawberries for garden culture.....	1 to 2 feet apart

NUMBER OF TREES OR PLANTS ON AN ACRE

						Square Method	Hexagonal or Equilateral Triangle Method
Distance—1 foot apart each way, number of plants.....						43,560	50,300
"	2	"	"	"	"	10,890	12,575
"	3	"	"	"	"	4,840	5,890
"	4	"	"	"	"	2,725	3,145
"	5	"	"	"	"	1,745	2,010
"	6	"	"	"	"	1,210	1,600
"	8	"	"	"	"	680	785
"	10	"	"	"	"	435	505
"	12	"	"	"	"	305	350
"	15	"	"	"	"	195	225
"	16	"	"	"	"	170	190
"	18	"	"	"	"	135	155
"	20	"	"	"	"	110	125
"	25	"	"	"	"	70	80
"	30	"	"	"	"	50	55
"	35	"	"	"	"	35	40
"	40	"	"	"	"	27	31

RULE: Square Method—Multiply the distance in feet between the rows by the distance the plants are apart in the rows, and the product will be the number of square feet for each

plant or hill, which, divided into the number of feet in an acre (43,560), will give the number of plants or trees to the acre.

RULE: Equilateral Triangle Method—Divide the number required to the acre "square method" by the decimal .866, or calculate the number by the "square method" and add 15 per cent. The result will be the number of plants required to the acre by this method.

We include in this Catalogue only such articles as we have grown on our own grounds, and have aimed to confine ourselves to cultivating only such varieties in both departments as, with proper care, will give entire satisfaction to our customers.

A. W. McDONALD, President

Yours very truly,

C. J. ATWOOD, Secretary-Treasurer

F. A. WIGGINS, Vice-Pres. and Sales Manager.

WASHINGTON NURSERY CO.

SPECIAL NOTICE—Those only who can show a certificate of recent date, with our signature and the seal of the company attached, are authorized to solicit orders for us. We wish to call special attention to this notice, as we know it has heretofore been the practice of unprincipled persons to procure the catalogues of prominent nurseries, and take orders in their names, which they will fill with poor stock bought elsewhere. If our patrons will notify us of any person whom they have reason to believe is not a regularly appointed agent, we shall consider it a favor.

What Our Customers and Friends Say:

These are a few commendations taken at random from letters received. They speak for themselves:

EASTERN WASHINGTON

North Yakima, Wash., April 17, '08.—Claude Briggs: "The trees were fine, 'out of sight.'"

North Yakima, Wash., April 12, '07.—C. Yostrig: "I received my trees in splendid condition."

North Yakima, Wash., April 14, '07.—Holdridge & Jackson: "The stock we feel very proud of."

North Yakima, Wash., April 9, '08.—Jas. H. Fraser: "For vitality and growth, you skin them all."

North Yakima, Wash., March 22, '08.—H. A. Griffin: "They were fine trees. Am well pleased."

Rockford, Wash., April 24, '07.—O. H. Jones: "Finest roots I ever saw on nursery stock."

Prosser, Wash., Jan. 22, '08.—Jno. F. Mason: "I am well pleased with the trees. I have nothing but praises for the Washington Nursery Company."

Prosser, Wash., March 27, '07.—H. O. Clapp: "Meyers well pleased with his trees. Says finest he ever saw."

Cashmere, Wash., 11-20, '07.—Ed H. Schmitt: "I am entirely satisfied and hope that I may always get as square a deal as I have with you people."

Oroville, Wash., May 2, '07.—C. L. Carpenter: "A fine lot of trees which every one says who sees them."

Oroville, Wash., May 2, '07.—J. R. Erwin: "My order was properly filled, and they are the best bill of fruit trees I have ever received, and I have been ordering fruit trees for the past four years. If there is any kick on this shipment, refer parties to me."

Twisp, Wash., April 29, '08.—C. K. Mullins: "Goods all delivered and satisfactory to everybody."

Waterville, Wash., July 26, '07.—W. R. Priebe: "I will want some more goods sent with these, but do not know just what I want yet. My trees are doing fine, so you may refer anyone to see them. I think they were the best trees shipped to Waterville this season."

Wenatchee, Wash., March 28, '07.—E. G. Koehler: "Those peach trees you sent me last fall were fine."

Wenatchee, Wash., April 11, '07.—Arthur W. Barlow: "The trees in this spring's delivery are the same old story, 'Best of them all,' and I do not see how anyone could possibly find fault with the stock sent. They were the cleanest so far as pests are concerned of any that have come this spring."

Waterville, Wash., July 24, '09.—W. E. Shipley: "Your stock has given splendid satisfaction, and we are sure to have a good trade."

Dover, Wash., April 10, '09.—H. B. Stallcop: "I wish to compliment you upon the trees I received from you. I have spent the past seven years in the Wenatchee Valley, and have handled some 20,000 young trees, but have never handled anything before that would compare with your this year's stock. The root system of your stock is best that I have ever seen. Everyone is inquiring where that fine nursery stock is from. I am certainly more than pleased with it."

Waverly, Wash., April 13, '09.—T. J. Saunders: "Your trees came as per orders sent you last fall, and will say that they were the best lot of Nursery Stock I have ever seen from any nursery in this state, and I have planted several thousand trees myself in the last 25 years."

Almira, Wash., April 26, '09.—F. E. Kunz: "The trees arrived O. K., and must say that I am well pleased with them, as they are the best looking trees I have seen come in this spring."

Kettle Falls, Wash., May 1, '09.—C. W. Singleterry: "Please find enclosed my report with new orders. Mr. ——— is a large fruit-grower, and he says our trees are the best of all."

Spokane, Wash., Nov. 1st, '08.—E. L. Morefield: "Order received in good shape. I beg to assure you by your fair dealings you have my best wishes and my patronage."

Hover, Wash., Nov. 4, '08.—C. C. Cantwell: "Everyone exceedingly pleased with stock."

Anglin, Wash., 11-5-'08.—I. J. Buckland: "The trees are in good shape. Everyone is well satisfied."

Kettle Falls, Wash., April 6, '09.—John W. Bradbury: "We are more than pleased with the goods."

Kahlotus, Wash., April 13, '09.—Wm. Howe: "The goods are fine."

Twisp, Wash., Nov. 4, '08.—Jas. B. Couche, M. D.: "The Winter Banana you shipped me have done exceedingly well. The average growth on my 100 trees is 55 feet. This was measured yesterday by County Inspector Ercey. Twelve shoots of 4½ feet each is an average of them."

Seattle, Wash., Oct. 1, '08.—Wenatchee Orchard Syndicate: "Referring to the order of 500 Elberta peach trees placed with you last spring by the Wenatchee Orchard Syndicate and planted by the Company at Entiat, we beg to state that out of the 500 there are alive and growing at the present time 490. Certainly we are very well pleased with the stock and for your information will say that a far larger percentage of your stock is alive than that secured from any other nursery. Will you kindly arrange for delivery to us next spring ten trees to replace those dead, under your usual terms as to replacements."

WESTERN WASHINGTON

Port Townsend, Wash., April 30, '09.—D. D. Gleason, D. D. S.: "Will say that the trees were all that I had expected them to be and you had told me. Shall be glad to speak a good word for you and will remember you if at any future time I have need of anything in your line."

Shelton, Wash., Dec. 26, '08.: "Your stock gave splendid satisfaction."—J. L. Brookover.

Sheridan, Wash., Nov. 23, '08.—R. J. Henderson: "I never saw finer or healthier looking roots on any trees for their age."

IDAHO

Cambridge, Idaho, Mch. 30, '09.—J. F. Bennett: "I wish to say that the apple trees I received from you were the best I ever saw. Grand."

Winona, Ida., April 12, '09.—T. M. Purdom: "Delivery at Nez Perce was very fine, the best that has ever been made by any nursery."

Blanche, Ida., April 12, '09.—T. J. Marcum: "Find all who received their trees entirely satisfied. In fact, some expressed themselves that these are the best trees that ever came in to Hagerman Country. I am well pleased to know this."

Hope, Ida., April 12, '09.—Arthur Croy: "Trees were pronounced by your customers best ever shipped into community"

Kamiah, Ida., Nov. 6, '08.—R. B. Miller: "Customers well pleased with trees and say they are the finest selections ever sent to Kamiah."

Cambridge, Ida., Mch. 30, '09.—E. V. Milligan: "Am pleased to report a 100 per cent delivery and all customers seemingly pleased."

Slickapoo, Ida., April 9, '09.—Mother Magdalene: "Everything received O. K., and we are highly pleased."

Grangeville, Ida., April 20, '09.—Carrie Greer: "I am well pleased with the trees and berries."

Cataldo, Ida., April 20, '09.—Weston Bailey: "Customers are all well pleased."

Harrisburg, Ida., Nov. 31, '08.—A. P. King: "Everybody well pleased."

MONTANA

Missoula, Mont., April 5, '09.—Joel A. Moss: "The customers were well pleased with their stock."

Kalispell, Mont., Nov. 21, '07.—P. N. Bernard: "I consider yours very fine stock."

OREGON

Hood River, Ore., Nov. 6, '09.—S. W. Heppner: "Everybody pronounces these the finest lot of trees, thrifty looking and well-rooted."

Medford, Ore., Nov. 11, '09.—L. E. Hoover: "Your stock sent is very fine indeed, the very best I ever handled, and was in most excellent condition and everybody well pleased."

Ashland, Ore., March 22, '08.—Thos. H. Thompson: "I have been more than pleased with your stock. The inspector said they were as fine trees as he ever saw come in."

Banks, Ore., March 26, '07.—Willis Hdw. & Imp. Co.: "Everyone seemed pleased with the stock, and it should be a good ad for you."

Central Pt., Ore., March 24, '08.—H. C. Messenger: "They are pronounced to be the best trees as a lot that have been set here."

Corvallis, Ore., Feb. 8, '08.—W. F. Groves: "My shipment of trees arrived in good condition. They are the best yearling stock I have seen and are entirely satisfactory."

Hood River, Ore., March 23, '07.—G. D. Eater: "My trees are the finest lot of trees that have been sent to Hood River this spring. I have called in some of my neighbors and their eyes stuck out when they saw them. I think my trees will be a good advertisement."

Myrtle Pt., Ore., Dec. 2, '06.—W. E. Dietz: "The shipment got here in fine shape and gave the best of satisfaction."

North Bend, Ore., March 21, '08.—D. D. Brainard: "The trees were fine and all were well satisfied."

NEW YORK

Quaker St., N. Y., Nov. 26, '08.—Paul Roach, M. D.: "While I have set many trees, these are the finest and best rooted I have ever set."

BRITISH COLUMBIA

Peachland, B. C., April 23, '09.—N. S. Davidson: "I was present the day your nursery stock was being opened up and I must say the stock you shipped to customers here was indeed a credit to your nursery company. The whole shipment averaged in each variety and was a lovely lot of trees."

Vancouver, B. C., Sept. 22, '08.—J. M. Kendall: "Every tree passed inspection splendidly and the inspector complimented me on it."

Ladysmith, B. C., Nov. 20, '08.—F. R. Gardner: "I received the stock in fine condition and must say they are the best I have handled yet."

Arrowhead, B. C., Dec. 28, '07.—H. Colbeck: "I bought fifty apple trees from your firm last spring, and they gave me entire satisfaction. I will be planting a few more this spring and would like a copy of your catalogue if you would be kind enough to send me same."

Salmon Arm, B. C., May 20th, 1907.—I. K. Smiley: "The stock was in splendid condition."

Revelstoke, B. C., May 2d, '07.—R. Tapping: "I have been buying trees for fifteen years for my orchard here. The trees you sent me this year are the best I ever got."

Vernon, B. C., Aug. 3, '07.—Jos. Wylie: "The stock from your nursery has proved the best I ever got. All trees looking fine."

Armstrong, B. C., April 6, '08.—Fisher & Sage: "The stock is in the best of condition and fine stock, and is giving good satisfaction."

CALIFORNIA

Red Bluff, Cal., Feb. 9, '08.—Jno. F. Vine: "Your stock has given good satisfaction so far. Some nurseries have had all their stock condemned, others 20 to 70 per cent returned or burned."

Visalia, Cal., Jan. 4, '08.—Jacob Muller: "It is a pleasure to deliver such nice stock and so far all customers have been pleased."

Visalia, Cal., March 9, '07.—Jacob Muller. "Mr. ———, Horticultural Commissioner, wants me to tell you that your trees are the cleanest of any received in this county by them this year, and that he mentioned that fact before the convention of Horticultural Commissioners of California held last month at San Jose."



OVERLOOKING 1,800,000 APPLE GRAFTS IN OUR PLANT. THE LARGEST APPLE PLANT EVER MADE IN THE NORTHWEST.

Fruit Department

APPLES (*Pyrus Malus*)

The first fruit in importance is the Apple. It will thrive on nearly any well-drained soil. Its period of ripening, unlike that of other fruits, extends nearly or quite through the year. By making judicious selections of summer, autumn and winter sorts, a constant succession can be easily obtained of this indispensable fruit for family use.

There is no farm crop which, on the average, will produce one-fourth as much income per acre as will a good Apple orchard. The average price paid for the fruit is steadily on the increase, and the immense demand for home consumption, foreign shipping, canning and evaporating, assures us that it will continue to increase. We especially recommend planting late-keeping winter varieties.

If Apples are planted at the rate of fifty trees per acre, thirty feet apart each way, rows of peach trees can be planted between the apples, which, growing more quickly than the Apple trees, soon protect them from winds, and thus prove a great benefit to them. After eight or ten years of productiveness, as the space is needed for the Apples, the peach trees may be removed, leaving the orchard better for the protection, and at the same time having yielded the planter a large return for his outlay and labor.

SUMMER VARIETIES

American Summer Pearmain. Medium to large; skin red, spotted with yellow in the shade, and streaked with lively red in the sun; flesh yellow, remarkably tender, juicy and rich; a good bearer. August.

Astrachan, Red. Large, roundish, nearly covered with deep crimson, overspread with a thick bloom; juicy, rich, acid, beautiful. The tree is a vigorous grower, with large foliage and a good bearer. August.

Bugh, Large Sweet. See Sweet Bough.

SUMMER VARIETIES—Continued

Carolina Red June (Red June). Medium size; red; flesh white, tender, juicy, sub-acid, and abundant bearer. June.

Early Colton. Entirely hardy in all parts of the country. Has stood the extreme cold of Minnesota, Wisconsin, New Hampshire. Annual and abundant bearer. Never in the

exceedingly productive, and early in bearing. July to October.

Red Russian. Early; very hardy, medium size, conical; color red, slightly striped with deep red; flesh white, tender, juicy, sub-acid. Abundant bearer; resembles the Red June, but flesh more solid and better shipper, and color not as solid a red as the Red June, but slightly striped. July and August.

Summer Queen. Medium to large, roundish; surface yellow, blotched and streaked with red; flesh yellow and tender, with an acid, aromatic flavor. July and August.

Sweet Bough. Large, pale greenish yellow; tender and sweet; moderate grower and good bearer. August.

Sweet June. Medium, roundish, regular; light yellow; very sweet, pleasant and rich. August.

Tetofsky. A Russian Apple which has proven profitable for market growing. The tree is a spreading, upright grower, forming an open head; comes into bearing extremely early, usually the second year after transplanting, and bears every year. Hardy as a crab. Fruit good size, nearly round; yellow, beautifully striped with red; flesh white, juicy, pleasant, acid, aromatic. July and August.

White Astrachan. Very large, roundish; skin very smooth and nearly white; a favorite market sort, where it always attracts attention and brings good prices. August.

Yellow Transparent. A new Russian variety imported in 1870, through the Agricultural Department. Pronounced by some who have seen it as "the most valuable early apple ever introduced." Tree an upright grower and a very early and abundant bearer. Fruit of good size; skin clear white, turning to a



ASTRACHAN, RED (See page 11).

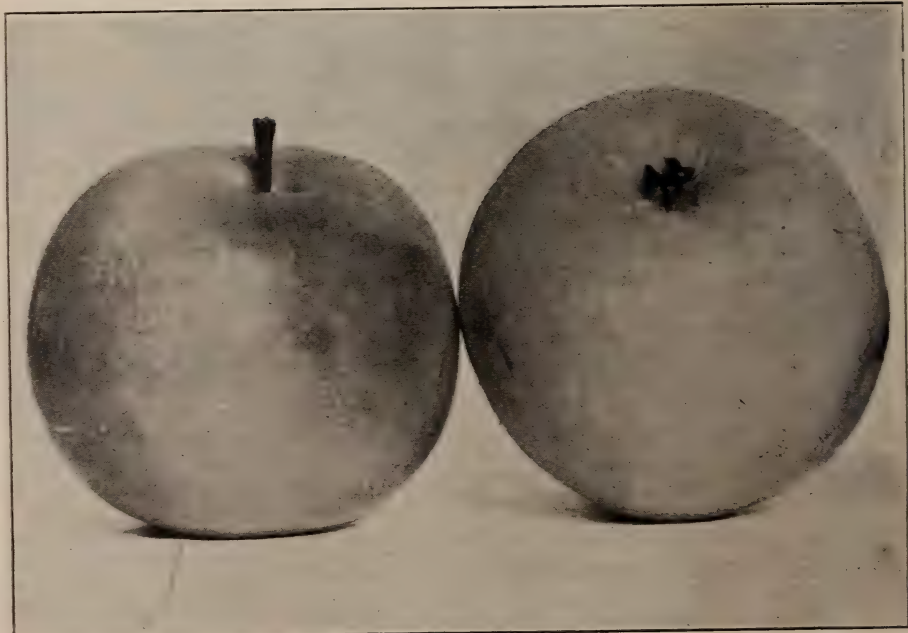
history of over half a century has it been known to entirely fail of a crop. Very early, beginning to ripen so it is good to eat ten days before Early Harvest, and continues to ripen for some time, making it very valuable for family use. Of beautiful appearance; fine quality.

Early Harvest (Yellow Harvest). Medium to large; pale yellow; fine flavor. Tree a moderate, erect grower, and a good bearer, a beautiful and excellent variety for both orchard and garden. Middle to end of August.

Early Strawberry. Medium, striped with deep red; tender, sub-acid and excellent; a poor grower, but productive. August.

Golden Sweet. Rather large; pale yellow; very sweet and good. Strong grower and good bearer. August.

Keswick Codlin. Large, conical; tender, juicy, acid; excellent for cooking. Tree erect, vigorous,



YELLOW TRANSPARENT.

SUMMER VARIETIES—Continued

pale yellow; flavor acid and very good. Ripens from ten days to two weeks earlier than Early Harvest. One of the most popular market varieties.

AUTUMN VARIETIES

Alexander (Emperor). Of Russian origin. Large; deep red or crimson; flesh yellowish white, crisp, tender, with pleasant flavor. Tree very hardy. October.

Autumn Strawberry. Medium, streaked; tender, juicy, sub-acid, fine; vigorous and productive. September and October.

Duchess of Oldenburg. Of Russian origin. Large size, roundish, streaked with red and yellow; flesh whitish, juicy; flavor sprightly, sub-acid. Tree a vigorous grower, very

Fall Jennetting (Summer Jennetting). Fruit large, oblate, slightly conical, almost ribbed; pale greenish yellow with a blush; flesh whitish, tender, juicy, brisk, sub-acid. Tree vigorous and productive. September to October.

Fameuse (Snow Apple). Medium size, roundish, oblate; whitish ground, striped with deep red; flesh very white, juicy and pleasant. Tree very hardy; one of the most valuable northern sorts. November and December.

Emperor. See Alexander.

Gloria Mundi. Very large; greenish yellow; valuable for cooking and drying. October.

Gravenstein. Large, striped and beautiful; tender, juicy and high flavored; vigorous and productive. September and October.

Haas (Gros. Pommier, Fall Queen). Medium to large, slightly conical and somewhat ribbed; pale greenish yellow, shaded and striped with red; flesh fine white, sometimes stained, tender, juicy, sub-acid, good. Tree vigorous and very hardy, upright grower, with well-formed head; bears early and abundantly. September to November.

Hoover (Wataugah). Large, oblate; dark red; juicy, acid, crisp and of good flavor. Ripens September and October. Tree vigorous, short-jointed grower. Very distinct.

Jefferis. Medium to large; yellow, striped, mostly red; flesh tender and delicious. One of the finest dessert apples; moderate growth; productive. September to November.

Jersey Sweet. Medium size; striped red and green; tender, juicy and sweet; a free grower and good bearer; very popular, both for table and cooking. September and October.

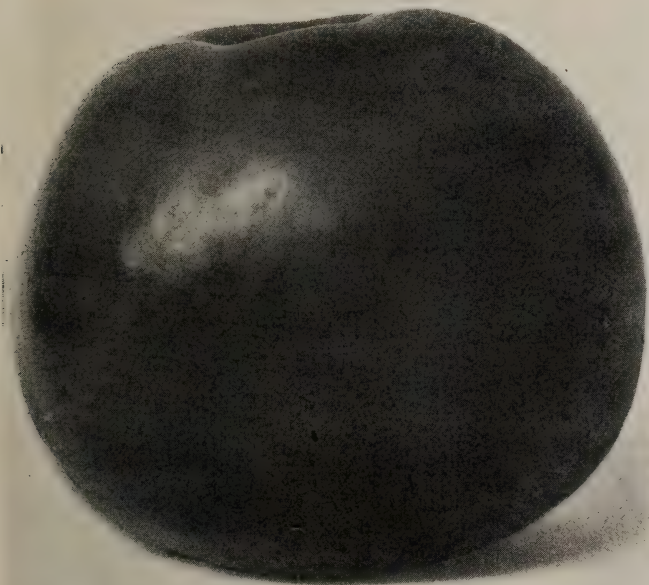
King of Tompkins County. Large and handsome; striped red and yellow; tree vigorous and productive. One of the best. November to May.

Maiden's Blush. Medium size, flat, quite smooth and fair; pale yellow, with beautiful red cheek; tender, sprightly, pleasant acid flavor. Fair grower and good bearer. September and October.

Rambo. Medium; yellowish, streaked with dull red and somewhat dotted; mild, tender and good. Fine grower, productive; more especially valuable at the West. October to December.

Red Bietigheimer. A rare German variety, recently introduced; fruit large to very large; skin pale green color, mostly covered with purplish crimson; flesh white, firm, sub-acid, with a brisk, pleasant flavor; tree a fine grower and abundant bearer. This is one of the largest and handsomest of apples, and promises to be extensively cultivated. September and October.

Snow. See Fameuse.



ARKANSAS BLACK (See Page 14).

hardy; very early and abundant bearer. While it is indispensable in the North, it is almost equally so in the South. We confidently recommend it for the orchard as one of the most valuable sorts for market, or in the garden for domestic use. September.

Dutch Mignonne. A popular apple introduced from Holland. Tree moderately vigorous, upright, spreading. Fruit medium, roundish, oblate, slightly conical; skin rather rough, yellow, shaded, striped and splashed with shades of light and dark rich red; moderately sprinkled with light and brown dots; flesh yellowish and a little coarse, tender, juicy, slightly sub-acid; core small. One of the best cooking varieties. November to February.

Fall Pippin. Very large, yellow; tender, juicy and rich. Tree vigorous. October to December.

AUTUMN VARIETIES—Continued

St. Lawrence. Large, yellowish, striped and splashed with carmine; flesh white, slightly stained; crisp, juicy, tender and vinous. Tree hardy and productive. September.

Twenty-Ounce (Cayuga Red Streak). Very large, nearly round; yellow, striped red; quality good; vigorous and good bearer. Popular as a market variety. November and December.

Waxen. Medium; pale yellow, oily, sprinkled with a few dots; flesh whitish yellow, crisp, tender, juicy, sprightly, sub-acid, good. November.

WINTER VARIETIES

Akin (Akin Red). Size and color very much like Jonathan, but keeps three months longer; quality even better than that most excellent apple. The apple for the fancy trade. Illinois Horticultural Society: "The original Akin tree is 7 feet 3 inches in circumference, about 40 feet high, and over 60 years old; a regular bearer; keeps until April or May. Of great beauty and excellent quality; fine-grained, crisp, spicy and mild. Its fine quality and beauty make it worthy of general trial, for the time will come when such fruit will be in demand. So beautifully colored as to be almost irresistible to the eye, and of equally fine flavor. It is of good quality, medium size, red color, a late keeper. Tree productive.

Antonovka. This is one of the true ironclads. The tree is of Russian origin and perfectly hardy, withstanding our coldest winters in fine shape. The fruit is large, slightly oblong, and when fully ripe of a light golden color. Good keeper.

Arkansas Beauty. Large; beautiful crimson; flavor rich, sub-acid; fine grained. Free and

good grower and enormous bearer. November to March.

Arkansas Black. Large, round or slightly conical; regular, smooth, glossy yellow, where not covered with deep crimson, almost black; flesh very yellow, firm, fine-grained, juicy; flavor sub-acid, pleasant, rich.

Babbitt. A strong, large grower; wood hard and tough; heavy bearer. Fruit one-third larger than Baldwin; brighter red; flesh fine grained, juicy, crisp, rich and of a peculiarly fine acid; use, baking, stewing, pies or jelly, for each and all of which it is simply the best; in cooking it literally melts. Ready to cook as soon as grown, but it is so acid that few like to eat it uncooked until the latter part of the season, when it is a favorite eating apple.

Baldwin. Large, roundish; deep bright red; juicy, crisp, sub-acid, good flavor. Tree vigorous, upright and very productive of fair, handsome fruit; one of the best and most popular winter apples. Originated on farm of John Ball, Wilmington, Mass., about the middle of the eighteenth century. January to April.

Black Twig. See Mammoth Black Twig.

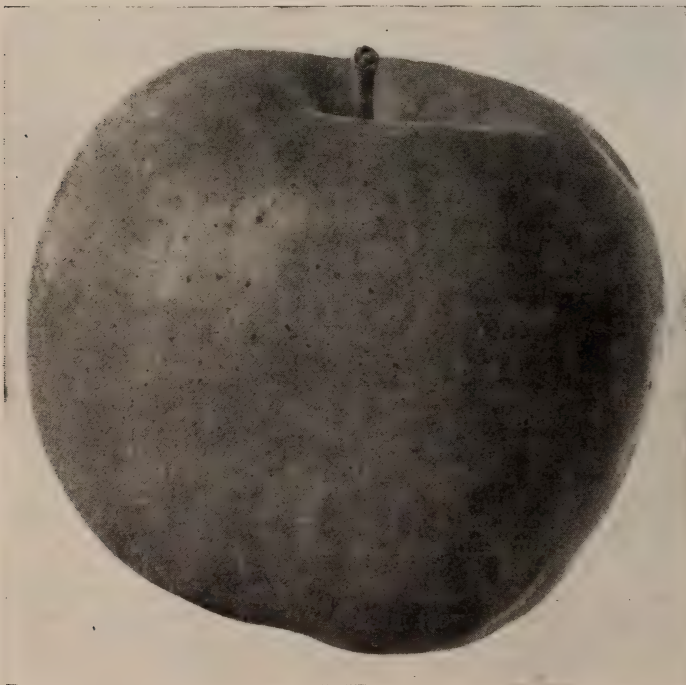
Belle de Goskoop. Large, bright yellow, washed with light red on the sunny side, and sometimes with a sprinkling of russet; flesh crisp, firm, juicy, sprightly, sub-acid; quality very good; a late keeper. Tree a vigorous grower.

Bellflower, Yellow. Large, yellow, with blush cheek; very tender, juicy, sub-acid. In use all winter. Very valuable. A moderate grower and good bearer.

Ben Davis (New York Pippin, Kentucky Red Streak, etc.). A large, handsome striped apple of good quality; tree very hardy, vigorous and productive; a late keeper. Highly esteemed in the West and Southwest.

Benton County Beauty. Originated in Benton County, Arkansas. Tree is a good grower, early and abundant bearer. Fruit large size, fine grained, juicy and crisp; color a bright red all over. One of the finest appearing apples grown.

Bismarck. In respect to its early fruiting habit, the most remarkable apple ever introduced; one-year grafts frequently produce fruit and two-year trees seldom fail. Has fruited in many sections of the United States; we hear only words of commendation. A two-year single-stem tree about eighteen inches high, has been known to ripen a fine specimen. Originated in New Zealand; has been tested in nearly every apple-growing country, and promises to succeed wherever apples can be grown, proving healthy, hardy, productive and without a rival in its early fruiting quality. Tree of short, stocky growth, thick, healthy foliage; makes beautiful specimens grown in pots for decorative purposes. Fruit large, handsome; yellow, sometimes shaded,



GRIMES GOLDEN (See Page 15).

WINTER APPLES—Continued

red cheek; flesh tender, pleasant, sub-acid; good for dessert; superior for cooking. Will keep well into winter.

Blenheim Orange. Fruit large, roundish, oblate, conical; yellowish, becoming deep orange, stained on the sunny side with dull and dark red stripes; flesh yellow, breaking, very sweet, pleasant, good. October to December.

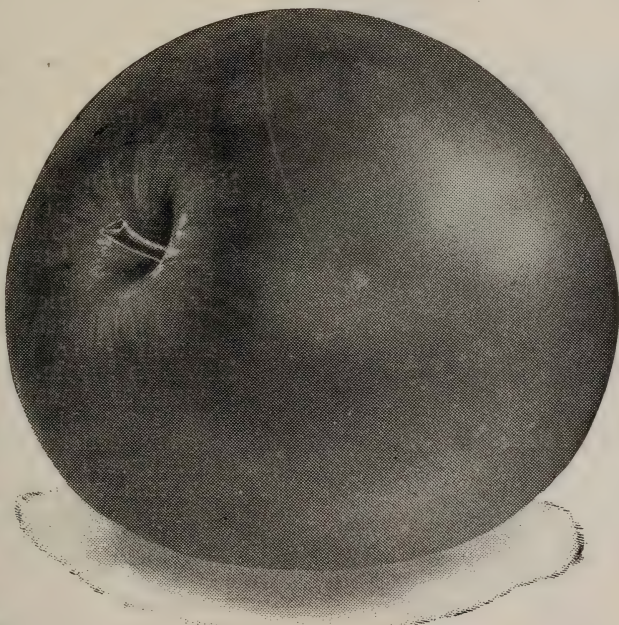
Blue Pearmain. Very large, dark purplish red over dull ground, appearing bluish from white bloom; flesh yellowish, mild, aromatic. October to February.

British Columbia. (New.) Named by the Fruit Growers' Association of British Columbia. Originated by H. P. Bales, at Nicomen in the Fraser Valley. The tree is a vigorous grower and very hardy, annual and abundant bearer; fruit large, russet on yellow ground, sometimes striped with red; somewhat irregular; flavor mild, sub-acid of the highest quality. Mr. Bales has now 400 trees of this variety bearing. The original tree, when 34 years old, measured sixty inches in circumference, and is still in a perfectly healthy condition. Mr. Bales has picked thirty-six fifty-pound boxes of apples from it in one season, and always gets from 25 to 50 cents per box more for them than for other varieties. We consider this one of the most valuable apples to plant for commercial purposes. January to June.

Canada Reinette. Extra large size, flattened and ribbed; greenish yellow, with russet dots and patches; flesh firm, rich, juicy and finely flavored; tree grows strongly and is a good bearer. November to March.

Cooper's Market. Medium size, conical; shaded and striped with red on yellow ground; flesh white, firm, tender, rather acid. Valuable for marketing. November to March.

Coos River Beauty. From Douglas County, Oregon. First known as Geourney Seedling, later renamed by a Marshfield, Oregon, nurseryman, Coos River Beauty. Tree a good grower, an annual and prolific bearer; does not break or split, no matter how heavily loaded. Fruit large; red, turning to dark red on the sunny side; flesh white, firm, breaking crisp and juicy; flavor mild, sub-acid, spicy, something like Gravenstein. Season November to March at Coos Bay.



JONATHAN.

Cox's Orange Pippin. Medium size, roundish, ovate; color yellow, suffused with red streaks; flesh crisp, juicy, sweet and best in quality. This is regarded by the English as the finest apple in cultivation, either as a dessert fruit or for culinary purposes. Tree a moderate, stocky grower. October to April.

Cunningham. (New.) Form conical, size medium; smooth, deep red; very attractive; flesh yellow, fine-grained, pleasant, sub-acid, almost sweet; splendid keeper and good shipper; annual and prolific bearer. March to May.

Delaware Red Winter (Lawver). Large, roundish flat; mild sub-acid; very heavy and hard; beautiful dark red; handsomest of all the extra-late keepers; very valuable as a late market sort. Tree a vigorous grower and very hardy; bears well; very promising late market variety. December to May.

Fallawater (Fornwalder, Tulpehocken). Very large, globular; yellowish green, dull red cheek; juicy, crisp, pleasant sub-acid flavor. Tree a strong grower; very productive, even while young. November to March.

Gano. Originated in Missouri. Form conical, good size and smooth; deep red, shaded on sunny side to mahogany; very attractive; flesh pale yellow, finely grained, tender, pleasant, mild sub-acid; is a good

shipper and keeper; tree healthy, vigorous and hardy. An annual and prolific bearer. February to May.

Gideon. Vigorous, early and prolific bearer. Medium, golden yellow; fine, juicy, sub-acid.

Grimes' Golden (Grimes' Golden Pippin, Sheepnose). An apple of the highest quality; medium to large size; yellow; tree hardy, vigorous, productive. January to April.

Hubbardston Nonesuch. Large, striped yellow and red; tender, juicy and fine; strong grower and good bearer. November to May.

Hyde's King. Large to very large; handsome yellowish green; good quality a remarkable keeper. Time of keeping, all the year round.

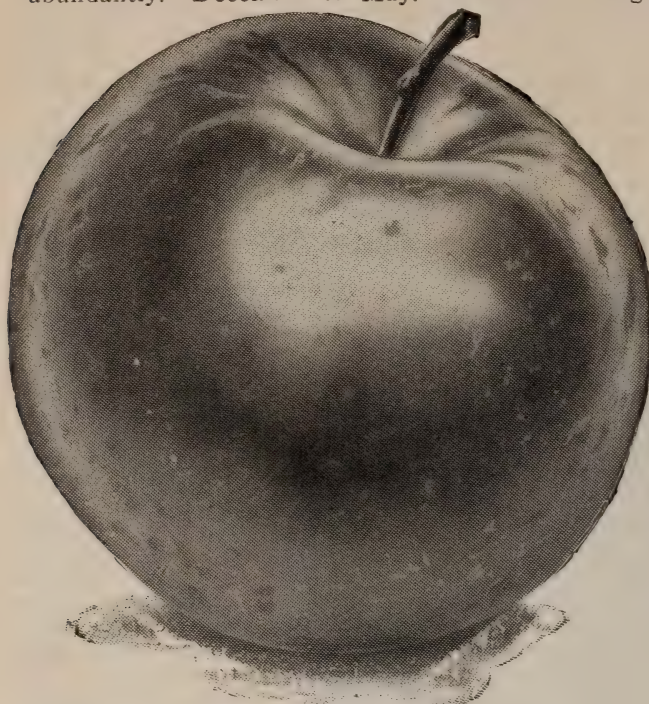
Isham Sweet. Large, dark red; juicier than its parent, Bailey Sweet, and a better keeper; tree very scraggy, but hardy.

Jonathon. Fruit medium or small, roundish; skin yellow, nearly covered with dark or lively red; fine grained, very tender and finely flavored; tree slender and spreading, with light-colored shoots. Originated about 1828 at Woodsted, N. Y. November to April.

WINTER APPLES—Continued

Kentucky Red Streak. See Ben Davis.

Lady. A beautiful little dessert fruit; quite small, flat, regularly formed; skin pale yellow or lemon color, with a brilliant red cheek; flesh crisp, juicy and excellent; bears abundantly. December to May.



MAMMOTH BLACK TWIG.

Lawver. See Delaware Red Winter.

Longfield. A Russian variety, imported some years since. Tree a free, upright grower, early and abundant bearer. Medium to large; yellow, with a blush on the sunny side like Maiden's Blush; rich, sprightly, sub-acid; quality as good as Fameuse and something like it. December to March.

McIntosh Red. An exceedingly valuable, hardy Canada sort. Medium size, nearly covered with dark red; flesh white, fine, very tender, juicy and refreshing. A good, annual bearer of fair, handsome fruit. Resembles the Fameuse but larger and more hardy and fully equal in quality to this standard sort. November to February.

Marshall, or Red Bellflower.

Very large, deep crimson; shaped like Yellow Bellflower. of fine quality; tree productive. Originated near Napa by J. L. Marshall, being a cross between Yellow Bellflower and Red June. One of the most valuable market varieties.

Minkler. Fruit medium, roundish, oblate, slightly conical; pale greenish yellow, striped and splashed with two shades of red; flesh yellowish, compact, moderately juicy, mild,

pleasant sub-acid; tree irregular grower, vigorous. January to April.

Missouri Pippin. Large, rich red, with darker red stripes; very handsome and of fair quality. Good grower; early and immense bearer, late keeper.

Monmouth Pippin (Red Cheek Pippin). Large, greenish yellow, with a fine red cheek; juicy, tender and good, tree erect, vigorous and productive. Keeps well till March or April.

Mammoth Black Twig (Paragon). A Tennessee seedling. The original tree, over fifty years old, is still vigorous and bearing, though broken by storms. Thought to be a cross between Winesap and Red Limber Twig; combines the good qualities of both. Excels Winesap in nearly every important point, a better and much stronger grower, hardier, and the fruit much larger—often measures 12 inches in circumference; color even a darker red; flesh firmer, flavor, milder, but fully equal. Remarkably heavy and a long keeper.

Mann. Fruit medium to large; roundish; oblate, nearly regular; skin deep yellow when fully ripe flesh yellowish, half fine, half tender, juicy, mild, pleasant, sub-acid. The tree grows straight and symmetrical and makes a large tree in the orchard. It is an early and annual bearer.

Newtown Pippin. One of the very best apples as to quality; tree a light grower while young; very juicy, crisp and highly delicious flavor; fine keeper.

Does not succeed in all sections. Originated in early part of eighteenth century. The first American apple to attract attention in Europe. December to May.

New York Pippin. See Ben Davis.

Northern Spy. Large, roundish, slightly conical, somewhat ribbed; striped, with the sunny side nearly covered with purplish red; flesh white and tender, with a mild sub-acid, rich and delicious flavor; in perfection



OPALESCENT (See Page 17)

WINTER APPLES—Continued

in January and keeps till June. The tree is a strong, upright grower, and forms a very compact head; should be kept open by pruning, so as to admit the air and light freely. Originated about 1800, at East Bloomfield, N. Y.

Northwestern Greening. Hardy, yellow, rich; of good size; extra long keeper.

Nonesuch. See Red Canada.

Ontario. Fruit large, oblate, slightly conical; skin whitish yellow, nearly covered with bright, rich red; flesh whitish yellow, fine, tender, juicy, sub-acid; refreshing, slightly aromatic; core small. January to April.

Opalescent. (New.) Probably the handsomest apple ever put on the market. Color light, shading to very dark crimson with many yellow dots; skin smooth, susceptible of a very high polish reflecting objects like a mirror; flesh yellowish, tender, juicy and good. The original tree has never failed to produce from a moderate to a full crop. It is not only a beauty, but all right for size, quality and productiveness, qualities rarely combined in one variety. Season December to March.

Oregon Red Winter. Fruit large, fine grained, crisp, juicy and rich. It could well be named the Winter Gravenstein, as its flavor so nearly resembles that variety. Color a bright red, with a dark maroon-colored cheek. Tree healthy and a strong grower, holding its fruit well until late in the season. Season from January to May.

Orengo. The new dessert apple. Full red overspread with numerous light-colored dots. Flesh crisp, tender and juicy, with a very small core; flavor mild sub-acid, with a pleasing aroma. Tree hardy, vigorous and productive. Superior to McIntosh Red or Spitzenburg as a dessert apple. November to May. Write for four-page circular.

Ortley. See White Bellflower.

Palouse. Large, bright red, juicy, crisp and fine flavor. A vigorous-growing tree; the fruit somewhat resembling the Baldwin, but better keeper. January to May.

Paragon. See Mammoth Black Twig.

Peck's Pleasant. Large, pale yellow; very tender and rich, with a Newtown flavor; tree erect and a fine bearer. November to March.

Peter. Another seedling which originated with Peter Gideon, the pioneer in apple culture in Minnesota. The tree is a stout, erect, symmetrical, healthy, vigorous grower, an immensely productive tree. Fruit large, red, sub-acid, and a long keeper. It possesses all the good qualities of the good sorts, and none of the defects so common to many of them. It is harder than the hardiest. The Peter has endured 45 degrees below zero without the least injury, and in 1885 at Excelsior, Minn., bore a crop of fruit when the Duchess and Wealthy killed to the ground. It is four to six weeks later than the Wealthy.

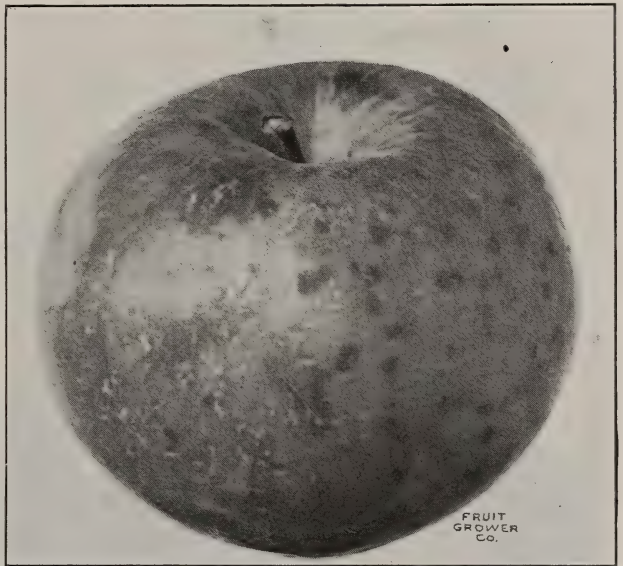
Pewaukee. A seedling from Duchess of Oldenburgh. Fruit medium to large, oblate; surface bright yellow, partially covered with dull red, striped and splashed, covered with a gray bloom, and overspread with whitish dots; cavity small, basin shallow and slightly fluted; calyx rather large; stem variable in length, with a fleshy substance on one side from one-half to one inch long; core small; flesh yellowish white, breaking, juicy; flavor sub-acid, rich, aromatic, spicy, something like the Jonathan; quality good to best; tree strong grower, heavy bearer and very hardy, January to June. New.

Pryor's Red. Medium; juicy, pleasant, very rich, sub-acid. January to March.

Rawle's Janet. Medium to large; yellow, striped with red; flesh yellow, tender, juicy, with a pleasant vinous flavor; prolific bearer. January to May.

Red Bellflower. See Marshall.

Red Canada (Old Nonesuch, of Mass., Steels' Red Winter). Medium, oblate; red; tender,



ROME BEAUTY.

crisp, rich, sub-acid, refreshing and delicious; tree thrifty but a slender grower; productive. January to May.

Red-Cheek Pippin. See Monmouth Pippin.

Red Romanite (Gilpin). Size medium, roundish; smooth, handsome; streaked with deep red and yellow; flesh yellow, firm, rich, becoming tender in spring. An excellent cooking and dessert apple; very prolific; holds on tree late. A fine winter apple and one of the best keepers. February to June.

Rhode Island Greening. Large, greenish yellow; tender, juicy and rich, with rather an acid flavor; growing strong and spreading, and an abundant bearer. December to April.

Rome Beauty. Large, yellow, shaded with bright red; flesh yellowish, tender, juicy, sub-acid; moderate grower. November to February.

WINTER APPLES—Continued

Russet, English. This is a most valuable, long-keeping variety. It is good the first of January and will keep till July, and no apple, to our taste, has a richer flavor. It is medium size, but smooth, firm, crisp and rich, and never loses its richness to the last.

Russet, Golden. Medium size, dull russet, with a tinge of red on exposed side; flesh generally crisp, juicy and high flavored; tree a vigorous grower and a great bearer. Very popular. November to April.

Russet, Roxbury or Boston. Medium to large; greenish or yellow russet; crisp, good, sub-acid flavor; tree vigorous and productive. Very popular on account of its long keeping. June.

Salome. Long keeper, annual bearer; medium and uniform size; good quality.

Scott Winter. Hardy and vigorous; bright red, crisp, spicy and of a brisk acidity; long keeper.

Seek-no-Further (Westfield). Medium to large, slightly russeted with dull red stripes; tender, rich, spicy and fine; good grower and bearer. November to February.

Shackelford. Tree hardy, free grower, an early and profuse bearer; fruit large, well colored, purplish red in the sun, with a delicate bloom; flesh yellow; flavor mild, sub-acid, aromatic; long keeper.

Sierra Beauty. Originated at a high altitude in the Sierra Nevada mountains, thirty miles east of Chico, Butte County, Cal. This beautiful crimson-red apple is certainly a great acquisition to the standard commercial sorts, and will pack better than four tier. The original tree is now, 1909, thirty-nine years old

and is a regular annual bearer. The flesh is white, crisp and tender, with a delicious juicy flavor. The tree is a hardy, upright grower, resembling the Northern Spy; a splendid cooking and eating apple. Season January to May.

Smith Cider. A fine market apple. Large, handsome, yellow striped with red; flesh juicy, crisp, sub-acid; quality medium; tree vigorous; abundant bearer. December to March.

Spitzenburg, Esopus. Medium to large; deep red; flesh yellow, crisp, sub-acid, high flavored; tree a light grower in the nursery, but bears and grows well transplanted in rich soil. November to April.

Spokane Beauty. Largest apple known; a prodigy for size; of extraordinary beauty; color greenish yellow, shaded and striped with deep red; flesh crisp, juicy, rich, with a delicious high flavor; unsurpassed for cooking and drying; a very long keeper, having kept until August 1; was awarded first prize at the Spokane Fruit Fair in 1895 and 1896.

Springdale. Color dark red, size medium to large; fine flavor and of good quality; a good keeper. Introduced in Kansas. Winner at fifteen different apple shows for home and market use. Tree a strong grower.

Stark. Esteemed in Ohio as a long keeper and valuable market fruit. Fruit large, roundish; skin greenish yellow, much shaded with light and dark red, and sprinkled with brown dots; flesh yellowish, juicy, mild, sub-acid. January.

Stayman's Winesap. Similar to Winesap, but very much larger and better flavored; oblate, conical, greenish yellow, mostly covered, striped and splashed with two shades of dark red, with numerous gray dots; flesh yellow, firm, tender, juicy, mild, sub-acid, aromatic; best quality. A seedling of the Winesap, originated in Kansas. Tree resembles the Winesap but more vigorous in growth. December to April.

Steele's Red Winter. See Red Canada.

Sutton Beauty. Medium to large, roundish; handsome, waxen yellow, striped crimson; flesh tender, juicy, sub-acid; good quality; keeps well. Tree a free grower and productive. One of the most beautiful and valuable apples.

Swaar. Fruit medium size, yellow, tender, rich and spicy; one of the best and very productive. November to May.

Tolman's Sweeting. Medium, pale yellow, slightly tinged with red; firm, rich and very sweet; the most valuable baking apple; vigorous and productive. November to April.

Tulpehocken. See Fallawater.



SPITZENBURG

WINTER APPLES—Continued

Vanderpool Red. Originated in Benton County, Oregon; size medium to large; color bright red; fine flavor, and one of the best keepers. Specimens of this variety, in good condition, were shown at the Oregon State Fair one year after picking from tree.

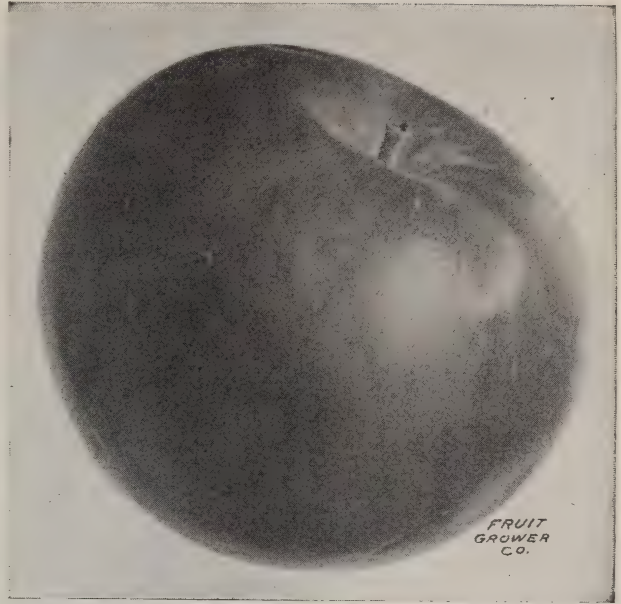
Vandevere (Newton Spitzenburg of the West). Medium size, waxen yellow, striped with red and becoming deep crimson next the sun; flesh tender, yellow, rich and fine; rich and sub-acid flavor; valuable cooking variety; free grower and good bearer. Succeeds best in light, warm, dry soils. November to March.

Wagener. Medium to large; deep red in the sun; flesh firm, sub-acid and excellent; very productive; bears very young. December to May.

Walbridge. Medium size; striped with red; handsome and of excellent quality; vigorous grower and productive; very hardy and considered of great value in the North and Northwest. March to June.

Wealthy. A native of Minnesota, where it has proven perfectly hardy, vigorous and productive; fruit of medium size, red, streaked with white; quality good. December to February.

White Bellflower (Ortley). Fruit medium to large, roundish, oblong, conic; greenish yellow, becoming fine yellow at maturity, sometimes with a sunny cheek; flesh white, fine grained, tender, juicy, sub-acid, very pleasant. November to February.



WEALTHY

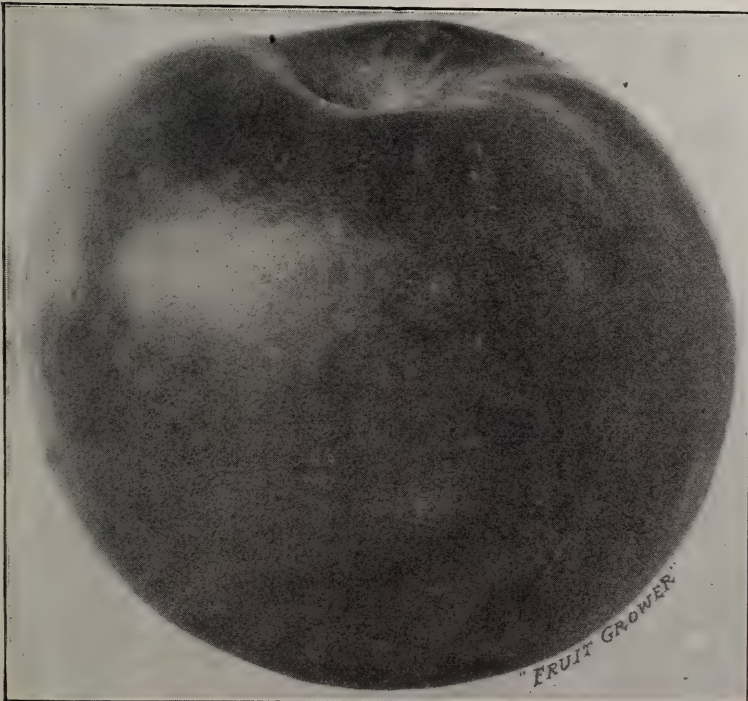
White Winter Pearmain. Large, roundish, oblong, conic; pale yellow, extra high flavor. One of the best. December to February.

Willow Twig. Medium size; light yellow, shaded and marbled with dull red and sprinkled with russet dots; flesh yellowish green, not very tender, pleasant, sub-acid.

Winesap. Medium; dark red, sub-acid, excellent; tree a moderate grower and abundant bearer. A favorite market variety in the West. December to May.

Winter Banana. Fruit large size, perfect in form; golden yellow, and beautifully shaded and marbled with bright crimson red; flesh lemon yellow, fine grained, sub-acid, rich, aromatic flavor and of the highest quality. A good keeper. Tree remarkably strong grower, and on account of its great hardiness, will thrive in any climate. Its early bearing is something simply wonderful, generally producing a fine crop of fruit the second year. Foliage large and free from blight and mildew. A valuable market variety. November to May.

Winterstein. One of Luther Burbank's new creations; a seedling of Gravenstein with a most delicious flavor; keeps with the Baldwin and Rhode Island Greening; flesh yellowish; flavor exceedingly tender, spicy, rich, sub-acid; color bright red, in stripes; tree a strong, vigorous grower and remarkable bearer;



STAYMAN'S WINESAP (See Page 18).

WINTER APPLES—Cont'd

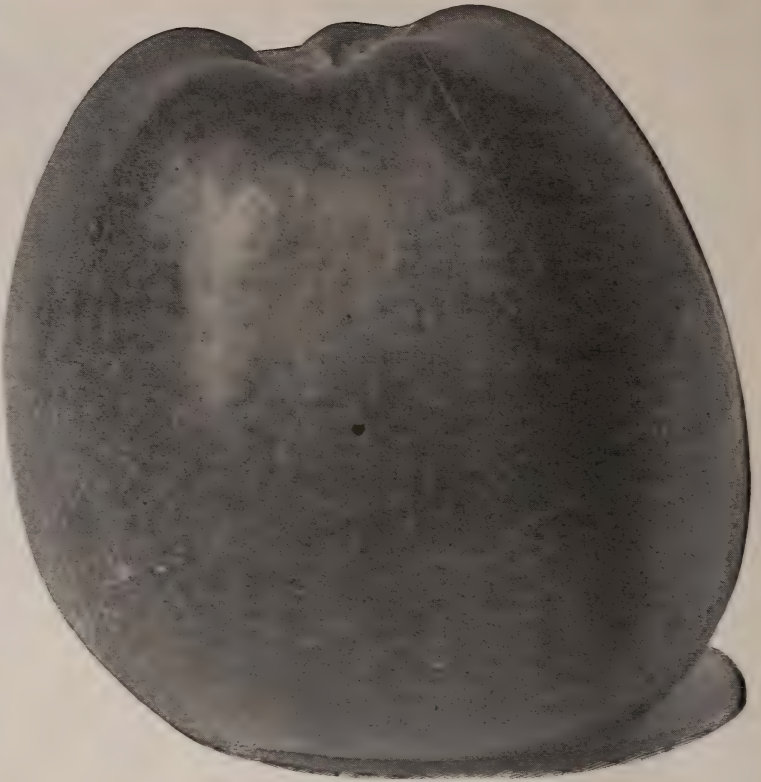
fruits every year. The best.

"It has often been said that if the Gravenstein lasted through the season no other apple need be raised. Other apples do not sell readily during the Gravenstein season. Its seedling, however, very rarely approaches in any manner its combination of good qualities, and the one which I now offer is not in some respects as good, but is much better in others. It is, therefore, introduced after severe tests, fully believing that it will prove a great acquisition in many places, not all, for no fruit, so far, has ever been known which would.

"One of its most valuable points is that it ripens with Baldwin and Rhode Island Greening, several weeks after Gravenstein; but in addition to this it is a much more prolific bearer, never failing to produce heavy crops and at the same time makes a growth fully as strong as Gravenstein."

Luther Burbank, writing to the Rural New Yorker, says:

"By this mail I send you a medium sample of my new Gravenstein seedling, six weeks later than its parent, ripening exactly with the Baldwin and Rhode Island Greening. The tree is a grand grower and as productive as an apple can possibly be. I think the quality, tenderness and texture remarkable."



WHITE WINTER PEARMAIN (See Page 19)

"We are wondering," writes the editor of The Rural New Yorker, "whether the horticultural and pomological work that Luther Burbank, of Santa Rosa, California, has done, is doing and may do, will ever be adequately appreciated. His latest success, and it seems to the writer, one of his most valuable successes, is an apple—a seedling of Gravenstein, a specimen of which he sent to us, and which we received October 27."

Wismer's Dessert. Size medium to large; smooth, beautifully colored with yellow, shaded with bright red, in stripes and blotches, marked with russet dots. Exquisitely delicious flavor, juicy, melting, buttery, pear-like texture. Tree a strong grower and extremely hardy. Originated in northern Ontario, Canada. Season November to April.

Condensed Statement of the Good Qualities of "Wismer's Dessert": (1) The tree is iron-clad in hardiness; (2) It is vigorous in growth and healthy in constitution; (3) It bears very early, regularly and excessively; (4) The fruit is winter in season, and is a first class shipper; (5) It is the most popular size, medium to large; (6) It is very handsome in appearance, being smooth



WINTER BANANA (See Page 19).

WINTER APPLES—Continued

and most brilliantly colored; (7) Its aroma and flavor are much superior to any other apple known; (8) Its texture is like a pear, being extremely juicy, melting, rich, buttery and free from fiber. This cannot be said of any other apple. For complete description and testimonials of our leading horticulturists, write for our four-page circular giving full particulars.

Wolf River. Tree very hardy and productive; fruit large and handsome, red color; flesh white and of exceedingly fine quality; sub-acid.

Y. N. Pippin. See Newtown Pippin.

York Imperial. Medium; whitish, shaded with crimson in the sun; firm, crisp, juicy, pleasant, mild sub-acid. Tree moderately vigorous and productive. A popular Pennsylvania variety. November to February.

CRAB APPLES (*Pyrus prunifolia*)

Within the past few years much attention has been given to improving this class of fruit, because of their adaptability to cold sections where only a few varieties of apples can be successfully grown. These efforts have been attended with marked success. Crab Apples succeed equally well in all sections, and are valuable for cider, preserving, jelly, ornament and some of the improved sorts are excellent for eating. Sent to the Eastern markets, they command a very high price. Every orchard should contain a few, as the trees are handsome, ornamental growers, annual bearers and usually fruit second year.

Alaska. Of northern origin. Fruit large, almost white; tree hardy; vigorous grower. Highly recommended.

Florence. Tree very hardy, a heavy bearer, but a poor grower. Fruit medium in size; good quality.

General Grant. Tree an erect, vigorous grower; fruit in dense clusters; quality equal to Duchess of Oldenburg. October to December.

Hyslop. Almost as large as Early Strawberry Apple; deep crimson; very popular on ac-

count of its large size, beauty and hardiness. Keeps well into the winter.

Large Red Siberian. About an inch in diameter; grows in clusters; yellow, lively scarlet cheek. Tree erect, vigorous; bears young and abundantly. September to October.

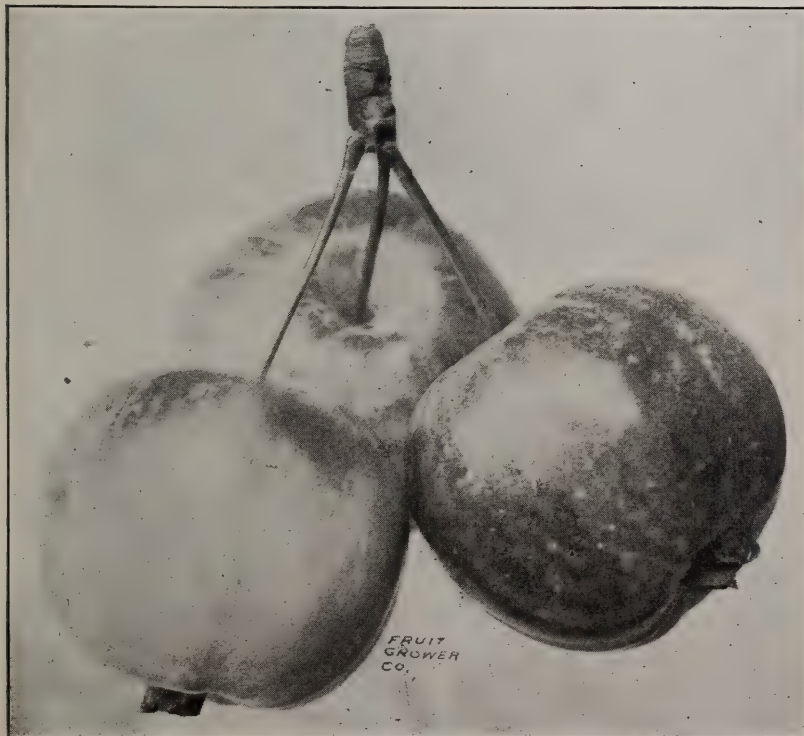
Large Yellow Siberian. Nearly as large as the above; fine amber or golden yellow color.

Martha. A new fruit raised from seed of the Duchess of Oldenburg. Resembles the Transcendent, but larger. Handsome, showy fruit; bears enormously; said to be equal, if

not superior, to all others for sauce.

Minnesota. Hardy; a medium grower. January, February.

Transcendent. All things considered, this is one of the most valuable varieties of Crab Apples grown. Tree remarkably vigorous, growing to a good size, and immensely productive. Comes into bearing a little the second year from planting, bearing every year after, and producing good crops by the fourth year. Fruit very large, from 1½ to 2 inches in diameter, being large enough to quarter and core for preserving and drying. Excellent for sauce and pies, both green and dried. The best of its class for cider, being juicy and crisp, and is also by many considered a good eating apple. Skin yellow, striped with red. September to October.



TRANSCENDENT.

CRAB APPLES—Continued

Van Wyck. Large; skin mottled with bright red; sweet. Tree vigorous.

Whitney's Seedling. Large, averaging 1½ to 2

inches in diameter; skin smooth, glossy green, striped, splashed with carmine; flesh firm, juicy and rich. Said to be a great bearer and very hardy. Tree a vigorous, handsome grower. Has no superior.

PEARS (*Pyrus communis*, or *P. Sinensis*)

BARTLETT PEARS.

The cultivation of this noble fruit is rapidly extending as its value is appreciated, and the demand for this fruit, both green and dried, is increasing every year, making it one of the most profitable fruits to plant. The range of varieties is such that, like apples, they can be had in good eating condition from August until early spring.

The melting, juicy texture, the refined flavor, and the delicate aroma of the Pear, give it rank above all other fruits, excepting the grape. The Pear, like most things highly desirable and valuable, cannot be had without attention and labor. The relative prices of the apple and Pear being about as one to three, purchasers of the latter can well afford to give the trees the high cultivation necessary to secure the best results.

GATHERING PEARS—One of the most important points in the management of Pears is to gather them at the proper time. Summer Pears should be gathered at least ten days before they are ripe, and autumn Pears at least a fortnight. Winter varieties, if they will hang so long, may be left until the leaves begin to fall, then place in a cool, dry cellar.

THIN THE FRUIT—We cannot urge too strongly the following suggestion: When the Pear trees are heavily laden, the fruit should be thinned when about one-third grown, else the fruit will be poor and the trees injured.

SUMMER PEARS

Bartlett. Large size, often with a beautiful blush next the sun; buttery, very juicy and high flavored. Tree a strong grower, bearing early and abundantly; very popular. Last of August and first of September.

Clapp's Favorite. A large, new, fine Pear, resembling the Bartlett, but without its musky flavor; pale lemon-yellow, with brown dots; fine texture, melting, buttery, juicy, with a rich, sweet, delicate, vinous flavor. Tree hardy and very productive; very desirable in all sections, and especially so where other varieties fail. August and September.

Doyenne d'Ete. Small, melting, sweet; yellowish. Tree vigorous and productive. August.

Koonce. Originated in Southern Illinois; has been largely planted; the most successful early market Pear in that section. A strong, upright grower; hardy, magnificent foliage; has produced crops when all other varieties

were killed by frost. Fruit medium, yellow, with carmine cheek; juicy, spicy, sweet and delicious quality; ripens with the earliest. An excellent shipper; it comes into bearing young. July and August.

Lawson. Tree healthy, a strong grower, early bearer and profitable sort; of splendid quality for a very early Pear; it colors beautifully. Red cheek with yellow shading.

Le Conte. Tree very vigorous and productive, partaking of the nature of the Chinese Sand Pear, of which it is a seedling. Fruit large, skin smooth, pale yellow. Quality fair. Ripens about with Bartlett.

Madeline. Medium; yellowish green; very juicy, melting, sweet. Fair grower, productive. August.

Souvenir du Congress. Recently imported from France, and of great promise. Fruit large and exceedingly handsome; beautiful yellow, with bright red in the sun; melting and juicy, with a musky flavor; rather tender. September.

SUMMER PEARS—Continued

Wilder. Handsome, melting, sweet, pleasant and of the best quality for an early Pear. One of the best keeping early Pears.

AUTUMN PEARS

Bessemianka. From Russia. Fruit of fair quality. Tree is extremely hardy; valuable for the North, where other varieties cannot be grown. It has proven as hardy as a birch. Strong, vigorous grower.

Beurre Claireau. Very large, pyriform; yellow and red; nearly melting, high flavored. Tree a very good grower, and an early and abundant bearer; a magnificent market fruit. One of the finest acquisitions. October and November.

Beurre d'Anjou. A large, fine pear, buttery and melting, with sprightly, vinous flavor. Tree a fine grower and good bearer. One of the very best. October to January.

Beurre Bosc. A large fine pear, with long neck, cinnamon russet, handsome, half melting; juicy, slightly perfumed and delicious. Tree fine grower and productive. One of the most valuable of our autumn pears. September.

Buffum. Medium size; yellow, somewhat covered with reddish brown and russet; buttery, sweet and excellent. A stout and upright grower.

Demsey. Originated in northern Canada, where it has proven hardy. Fruit medium size and of excellent quality.

Doyenne du Comice. Large, yellow, with a crimson and fawn cheek and russet dots; melting, rich, perfumed and luscious. Tree vigorous and productive. A pear of much promise. October and November.

Doyenne White (Fall Butter). Medium, pale yellow, with a faint blush; fine flavor. October to November.

Duchesse d'Angouleme. Very large; greenish yellow, sometimes a little russeted. Makes a beautiful tree; does best on quince. One of the best. October and November.

Fall Butter. See Doyenne White.

Flemish Beauty. Large, beautiful, juicy, melting, rich and fine; strong grower and good bearer; hardy everywhere. September and October.

Garber. Originated in Pennsylvania; is large and beautiful, bright yellow with red; juicy and good; delicious canned. Ready to pick with Le Conte, or a few days later, and much better, not only in fruit, but in hardiness and health of trees. So far has never been blighted.

Howell. Large, light waxen yellow, with a fine red cheek; handsome, rich, sweet, melting, perfumed aromatic flavor. Tree an upright, free grower, an early and profuse bearer. Very hardy and valuable. September and October.

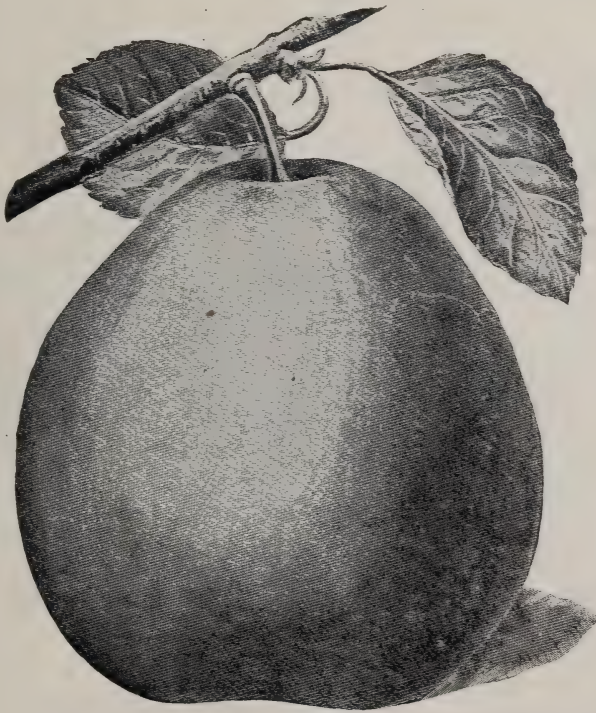
Idaho. Size large, nearly globular, obtusely ribbed; color light, rich yellow surface, covered with many small dots; cavity very deep and narrow, and strongly furrowed; stem small and calyx closed; flesh white, fine grained, buttery, melting and rich. Sept. and Oct.

Kieffer's Hybrid. A remarkable growing tree, with so vigorous a constitution that it rarely, if ever, blights. Fruit of fine size, rich color and good quality. Brings high price in competition with other varieties. Best when picked at maturity and house ripened. October and November.

Louise Bonne de Jersey. Rather large, greenish yellow, with a bright red cheek; juicy, buttery and melting; excellent; very productive; a fine grower on both pear and quince. September and October.

Rossney. A new and excellent pear, raised from seed

at Salt Lake City, Utah. In size medium to large; very fine grain; flesh melting and juicy, very sweet. Ripens two weeks after Bartlett. Is an excellent keeper and shipper. The tree is much stronger than Kieffer. Luther Burbank says, under date of October 5, 1895: "The samples of Rossney pear arrived in due season. The large size, handsome form and creamy yellow skin with crimson blush, give the fruit a tempting appearance, and the tender, creamy flesh of just the right texture, with no hard spots and an unusually small core, with its superior flavor, makes it about the best pear so far seen. If the tree is vigorous, healthy and productive, would prefer it to any other, even the standards, Bartlett or Seckel." September.



BEURRE D'ANJOU

AUTUMN PEARS—Continued

Seckel. Small, rich yellowish brown; one of the best and highest flavored pears known; productive. September and October.

Vermont Beauty. Tree hardy and vigorous, early and abundant bearer. Fruit medium, yellow, with red cheek; rich, juicy; best quality. October.

Worden-Seckel. A seedling of the Seckel, which, for many years, has been conceded to be the standard of excellence. Equal in quality to its famous parent, which it much resembles in flavor; is equally luscious, more juicy, and with an aroma equally rich and inviting, while in size, color, form and appearance it is decidedly superior. In color, when well ripened, it closely resembles Clapp's Favorite, with a skin that is usually as smooth and waxy as if it had been varnished. Tree a more upright and rapid grower than Seckel; hardy and enormous bearer; fruit keeps well, retaining its quality to the last.

WINTER PEARS

Beurre Easter. Large, pale yellow, sprinkled with round dots, often dull red cheek; quality good. One of the best winter pears. Keeps all winter.

Kennedy. Originated by General John Bidwell, on Rancho Chico, Butte County, California. Superior to Bartlett or Winter Nelis. Would be classed as a winter variety in northern sections; hardy, vigorous growing tree; bears well. The most valuable new pear, originated in California.

Lincoln Coreless. Large, green until thoroughly ripe, when it becomes a beautiful yellowish green; flesh rich yellow, juicy, melting, and of a very delicate aromatic flavor; no seeds or core. February and March.

Mount Vernon. Medium to large, of rich russet color; flesh juicy, rich, melting, with a

spicy flavor. New. November to January. **Pound.** A monstrous, very showy fruit, often weighing three pounds; yellow, red cheek. Tree very vigorous and productive.

P. Barry. This pear was originated by the late B. S. Fox of San Jose, and is acknowledged by our best judges to possess qualities unequalled by any of our long-keeping pears. It is large, deep yellow, nearly covered with a rich golden russet; flesh whitish, firm, juicy, melting, sweet, slightly vinous and rich; an early and prolific bearer. December and January.

Pratt's Seedling. Originated in Salem, Oregon, with Captain Pratt. A pear with all the good qualities of the Bartlett, but will keep until March. In shape and color like the Sheldon, but larger. The tree is a fine grower, with a more spreading top than the Bartlett. Has been shown at our Fruit Convention and is endorsed by all our fruit-growers; a fine acquisition to our list of winter varieties.

Vicar of Winkfield (Le Cure). Large, long; not first quality, but desirable for its productiveness. Best on quince. November to January.

Winter Bartlett. This fine pear originated at Eugene, Oregon. The tree stands in a doorway in that city, bearing fine fruit, and has, with possibly two or three exceptions, borne a good crop for over twenty years. Tree very vigorous, a foot in diameter and forty feet high. Has had no pruning or care, yet it is as symmetrical and pretty shaped tree as one ever sees. Fruit large, closely resembling the Bartlett in shape and appearance; perfectly smooth, flesh tender, juicy and melting; flavor similar to the Winter Nelis, but season a little later, and as good as can be desired.

Winter Nelis. Medium in size; yellowish green and russet; fine grained, melting, rich and delicious; one of the best winter pears. Tree straggly, slender grower, but very productive. December.

CHERRIES

HEARTS AND BIGARREAUS (Cerasus Avium); DUKES AND MORELLOS (C. vulgaris).

There are few more desirable trees than the Cherry, and they are being planted in larger numbers every year, as they can be grown for the market with great profit. It may be planted along the street or avenue as an ornamental, especially the Heart and Biggarreau varieties, which are strong, vigorous growers, with large, glossy leaves and open, spreading heads, making a fine shade, and at the same time producing an abundance of the most delicious fruit. Cherries thrive in almost any dry or well-drained soil. The fruit is equally delicious whether eaten from the tree or preserved, and it will always find a ready market at profitable prices for shipping, canning, etc.

The Hearts and Bigarreaus will successfully resist cold weather so as to be grown in most sections, excepting the extreme North, while the Dukes and Morellos, or acid sorts, are perfectly hardy and are starred (*) in this catalog.



NAPOLEON BIGARREAU (See Page 26)

CHERRIES—Continued

Allen. Has been fruiting for several years.

Tree a healthy grower, immensely productive. Fruit of excellent quality; large size, nearly heart shape, shiny and smooth; color when ripe, nearly black, very meaty and firm; so far free from all rot and disease; ripens late. Good enough for any home use and we believe will prove one of the most profitable market varieties in all sections where the sweet cherries succeed.

***Baldwin.** This cherry is a seedling of the English Morello, and it was originally planted for an Early Richmond, which has been budded on a seedling of the English Morello. The budded part was accidentally broken off and a sprout came from the root, which was so vigorous that it was allowed to grow. The tree is an upright grower, more inclined to be round than otherwise. A very rank, vigorous grower; leaves rather broad; bloom pure white, which turns to pink color, similar to the hydrangea; fruit very large, almost perfectly round, very dark, yet almost transparent; flavor slightly sub-acid, yet the sweetest and richest of the Morello type; stems rather large, of medium length, more inclined to grow in pairs than in clusters. It is remarkable for earliness, vigor, hardiness, quality and productiveness. It is a tree to command attention and is so distinct as to attract comments from many upon seeing it, without knowing its superior merit.

Bing. This grand new black cherry was originated by Seth Luelling of Milwaukie, Oregon. Size very large; blackish purple. Flesh very solid, flavor of the highest quality. Tree thrifty, upright grower, very hardy and productive. A fine shipping and market variety.

Black Republican (Luelling). A native of Oregon. Fruit very large, shining black; flesh very solid and firm; fine; a good keeper and will bear transportation well. Tree a moderate grower and rather tender; an early and profuse bearer.

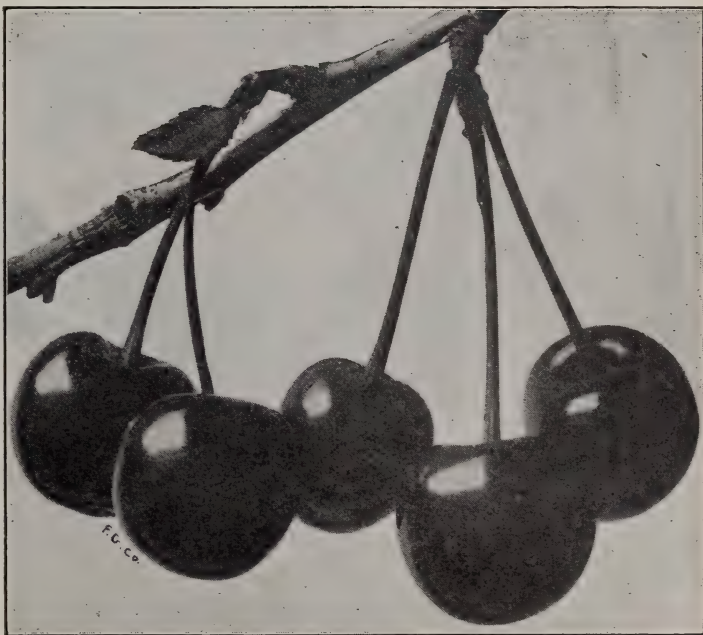
Black Tartarian. Very large; bright purplish black; half tender, juicy, very rich, excellent flavor. Tree a vigorous grower and productive. June.

Centennial. A new cherry; a seedling of Napoleon Bigarreau, raised by Mr. Henry Chapman, in Napa Valley, California. It is larger than its parent, more oblate in form and beautifully marbled and splashed with crimson on a pale yellow ground. Its sweetness is very marked. Its keeping qualities after being taken from the tree will undoubtedly render it the best cherry for shipment, specimens having been carried to the East-

ern states and Europe without apparent injury.

Chapman. This grand new cherry originated in Napa Valley, California, where it ripens about April 10. It is the earliest of all shipping varieties, bears early and immense crops of fine luscious fruit, which grows somewhat more in clusters than Black Tartarian; size very large; form roundish, stem long and slender; surface smooth; color purplish black; flesh half tender; stone small; flavor of the highest quality. On account of its great beauty, quality and earliness, it is a very profitable market variety. Said to be a seedling of the Black Tartarian.

***Dyehouse.** Partakes of both the Duke and Morello in wood and fruit; a very early and sure bearer. Ripens a week before Early Richmond; of better quality and quite as productive.



EARLY RICHMOND.

Deacon. This new cherry is supposed to have originated at Sacramento, California. Color black; flesh firmer than Luelling (Black Republican), and much larger. Ripens with Black Tartarian; flavor of the highest quality. It has been shipped from Sacramento to New York, arriving in prime condition.

***Early Richmond (Kentish, Virginian May).** Medium size, dark red, melting, juicy, sprightly, acid flavor. This is one of the most valuable and popular of the acid cherries, and is unsurpassed for cooking purposes. Tree a slender grower, with a roundish spreading head, and is exceedingly productive. The most hardy of all varieties, uninjured by the coldest winters, when almost every other variety has been killed.

CHERRIES—Continued

***English Morello.** Medium to large; blackish red; rich, acid, juicy and good; very productive. August.

Early Purple Guigne (Early Purple). The earliest fine variety; medium size; heart shaped; tender, juicy and sweet. Tree rather a slender grower, but very hardy and productive. First to middle of June.

Elton. Large and fine flavor; pale yellow, light red next the sun; vigorous grower. Last of June.

Governor Wood. Large, rich; light yellow with red cheek; juicy and sweet. Last of June.

Hoskin. Originated by C. E. Hoskin, Newberg, Oregon. Very large; color black, flavor similar to Black Tartarian. A very promising variety.



BLACK TARTARIAN (See Page 25)

Knight's Early Black. Large, black, tender, juicy, rich and excellent; good grower and productive. Middle to last of June.

***Kentish.** See Early Richmond.

Lambert. In size the largest known; smooth, glossy skin; color dark purplish red, with numerous minute, indented, russet dots; flesh dark purplish red, with whitish veins, firm meaty texture, small oval stone, semi-cling; flavor sweet or very mild sub-acid, rich and of highest quality; form roundish, heart shaped, long, slender stem. The finest shipping variety. Originated near Portland, Oregon, about 1887, and named after the originator. Tree thrifty, hardy and vigorous grower, and forms a beautiful head. Donated by Mr. Lambert to Oregon State Horticultural Society and the sole right to propagate it purchased from them by the Oregon Nursery Company, from whom we have secured a right to grow and distribute.

***Late Duke.** Large, light red; late and fine. Last of July.

Luelling. See Black Republican.

***Lutovka.** A Russian sort of the Morello type. Fruit firm, good quality, sprightly, acid, as large as English Morello; similar to that variety in color; clings tenaciously to the long stem. August.

Major Francis. See Oxheart.

***May Duke.** Large, red; juicy and rich; an old, excellent variety; vigorous, productive. June 15.

***Montmorency Large.** A large, red cherry; larger than Early Richmond and fully ten days later.

***Montmorency Ordinaire.** A beautiful, large, red, acid cherry; larger and finer than Early Richmond, and fully ten days later, ripening with Tradescant's. Being extraordinarily prolific and very hardy, it can be recommended as a variety of great value; valuable for canning and preserving. Free grower.

Napoleon Biggareau (Royal Ann). A magnificent cherry of the largest size; pale yellow with bright red cheek; flesh very firm, juicy and sweet. One of the best for market and canning. Late.

***Olivet.** A new Duke of French origin. Unlike most others of this class, it is said to be very early and to ripen over a long period. Fruit very large, globular and of a deep shining red; tender, rich and vinous, with a sweet, sub-acidulous flavor.

***Ostheim.** A hardy cherry from Russia. It has been tested in the severest winters of Minnesota and has been found perfectly hardy. Fruit

large, roundish ovate; skin red, dark at maturity; stalk long; flesh liver-colored, tender, juicy, almost sweet.

Oxheart (Major Francis). Fruit large, obtuse, heart-shaped; skin dark red; half tender, with a pleasant juice, of second quality in point of flavor. Last of June.

Royal Ann. See Napoleon Bigarreau.

***Vladimir.** Russian variety; very hardy; a strong grower, wonderfully prolific. Fruit size of Early Richmond; mild, sub-acid, juicy; excellent quality. July.

Windsor. New seedling, originated at Windsor, Canada. Fruit large, liver-colored, resembling the Elkhorn or Tradescant's Black Heart; nevertheless quite distinct; ripens three or four days after that variety; flesh remarkably firm and of fine quality. Tree hardy and prolific. Valuable late variety for market and for family use.

***Wragg.** Much like English Morello. More productive and excels in size, yield and qual-

CHERRIES—Continued

ity. One of the hardiest cherries and has produced annual crops at the northernmost limit of cherry culture.

Yellow Spanish. Large, pale yellow, with red cheeks; firm, juicy and excellent, one of the best light-colored cherries; vigorous and productive. *Last of June.

PLUMS (*Prunus*)

The Plum has not, in recent years, been planted as extensively as it deserves, and the lack of planting has doubtless been partly due to difficulty in marketing; but with the demand for good fruit in the Eastern markets almost unlimited, and the excellent shipping qualities of the Maynard and others, and the establishment of canneries in most important fruit sections, they are again being planted in large quantities, as it is known that a little care and attention at the proper time will insure a crop.

The Plum tree, like the pear and other finer fruits, attains its greatest perfection in our heavy soil, being entirely free from disease. Plums are hardy and grow vigorously in nearly all sections, succeeding best on heavy soils in which there is a mixture of clay.

Most of the cultivated varieties of Plums are European, or descendants of European varieties. But in recent years certain extraordinarily good varieties of native Plums have been widely disseminated, and recently we have received some extremely valuable varieties from Japan. Crosses from all these will, from time to time, bring out new and much improved varieties, especially securing the best quality of the European Plums, united with the hardiness, desirable season or good shipping qualities of the others.

The finer kinds of Plums are beautiful dessert fruits, of rich and luscious flavor. For cooking and canning they are unsurpassed. For best flavor they should be allowed to remain on the tree until fully ripe; but for shipping to market, they must be gathered a very few days earlier, when they may be shipped long distances, arriving in good condition. Overbearing should not be allowed.

Some varieties, especially of the native Plums, are extremely hardy and will stand the climate of the extreme Northwest.

JAPANESE, OR ORIENTAL PLUMS

These Plums have awakened more interest during the past few years than any other recent type of fruit. This race is as distinct from our native varieties as the Yellow Newtown is from the Baldwin apple. Many of these varieties are succeeding well in the Northern and Western states, in many places where the European varieties cannot be depended upon; some are hardy as far north as where the Wild Goose succeeds, and for the Southern states they open a new field in Plum-growing. They unite size, beauty and productiveness, and come into bearing at the age of two to four years. Flesh firm and meaty, will keep for a long time in excellent condition. Their early blossoming habit renders them unsafe in some sections and they will never entirely take the place of our older varieties, but possess many valuable characteristics. Should be well tested in all sections. Like most Japanese types of trees, the names of the imported varieties are much confused, but we follow the names adopted by the leading nurserymen of this country.

These Plums, together with the hybrids and crosses produced by Luther Burbank (which are starred (*) in this catalogue), are among the most valuable additions in the way of new fruits that have been introduced in the past ten or fifteen years. We would call your special attention to the **Maynard**, the greatest Plum that has ever been introduced.

"Altogether the Japanese Plums constitute the most important type of fruit introduced into North America during the last quarter of a century, and they should receive careful tests in all parts of the country."—Prof. Bailey, Cornell University, Ithaca, N. Y.

We group Plums under the following divisions: A, Americana type; very hardy (Chickasaw types) D, Domestica, European types; J, Japanese type; J* (starred), Japanese Hybrids, and crosses of the Japan Plums introduced by Luther Burbank.

Abundance. J. (Botan). One of the best Japan Plums.

The tree is a very rapid grower, healthy in limb and foliage, comes into bearing remarkably young and yields abundantly. The fruit is full medium size, color a rich, bright cherry-red, with a distinct bloom, and highly perfumed; flesh light yellow, very juicy and tender, and of excellent quality; vigorous, hardy. Mr. Geo. W. Thissell, of Winters, Cal., says of this fruit: "I have fruited it three years; have found it very prolific; fruit large to very large; exceedingly



PLUMS—Continued

sweet; pit very small; ripens at Winters June 10. I consider this one of my best shipping Plums."

Apricot Plum. See *Prunus Simoni*.

Bartlett. J*. One of the best of Burbank's recent introductions. Said to be wonderfully productive; a very ornamental tree, with glossy green leaves, resembling very closely the famous Bartlett in habit of growth, flavor and fragrance. Fruit oval, yellow, turning to deep crimson when fully ripe; flesh light salmon-colored. firm and juicy. Ripens before Burbank.

Blood Plum. See *Satsuma*.

Bradshaw. D. Fruit very large; dark, violet-red; flesh yellowish green, juicy and pleasant. Tree vigorous, erect and productive. Middle of August.

Burbank. J. Very vigorous grower; early and very heavy bearer; fruit very large; yellowish ground, with red cheek in the sun; flesh yellow, firm and very sweet when fully ripe; extremely small pit, which clings. Middle of June.

Climax. J*. This is well named the "King of Plums," as its extreme earliness, immense size, high color, delicious flavor and fragrance place it in the lead among early shipping Plums. Fruit heart shaped; color deep, dark red, flesh yellow. Tree vigorous and remarkably productive.

Coe's Golden Drop. D. Large and handsome; light yellow; firm, rich, sweet; one of the best of late Plums. Last of September.

Columbia. D. Fruit of the largest size; 6 or 7 inches in circumference, nearly globular;

**BURBANK.**

skin brownish purple, dotted with numerous fawn-colored specks; flesh orange, not very juicy, but when at full maturity very rich, sugary and excellent. Last of August.

Damson. D. Fruit small, oval; skin purple, covered with blue bloom; flesh melting and juicy, rather tart; separates partly from the stone. September.

Green Gage. D. Small; considered the standard of excellence; slow grower. Middle of August.

Forest Rose. A. A native of Pike County, Mo. Fruit round, larger than Wild Goose; skin rather thick and of a beautiful dark red color, covered with a delicate bloom; stone small; fine quality.

Jefferson. D. Large, yellow, reddened in the sun; juicy, rich and delicious; one of the best. Last of August.

Kelsey. J. Japanese; very large, rich, reddish purple on yellow ground; tree a prolific and early bearer; very largely planted for shipping East. The largest of all plums.

Lombard. D. (Bleeker's Scarlet). Medium, round, oval; violet-red; juicy, pleasant and good; adheres to the stone. Tree vigorous and productive. A valuable market variety; one of the most hardy and popular. Last of August.

Maynard. J*. Originated by Luther Burbank, the great master of modern horticulture.

**MAYNARD.**

PLUMS—Continued

In size it is very large, often measuring $7\frac{1}{2}$ inches in circumference. Form nearly round, slightly flattened at the ends, of richest crimson purple, deepening to royal damask as full ripeness is reached. Tree hardy, vigorous and compact grower. Leaves dark glossy green. Bears immense crops of even-sized fruit while very young. Never fails. Surpasses all other varieties in keeping and carrying qualities. Flesh firm, even when dead ripe, but melting and juicy, with a deliciousness indescribable. Commands the highest price in home and foreign markets.

Miracle. Originated by Luther Burbank, of Santa Rosa, California. A cross between the French fruit, *Prunus Sans Noyeau*, and the French prune. In general form it resembles the French prune, its staminate parent, but is larger in size. The color is distinctly of the Damson type, a rich, dark purple with heavy blue bloom. Flesh of good quality, sweet, rich and juicy, with stone wholly eliminated. Those desiring a fuller description, write for special Miracle Plum 16-page catalogue.

Milton. A. Rather large, dark red; skin thin; flesh firm; good quality; ripens earlier than

mense annual bearer; curculio-proof. Tree perfectly hardy, a strong, vigorous grower. One of the most profitable trees for the fruit-grower. Four-year-old trees have borne a crop of two bushels to the tree.

Prunus Simoni. J. (Apricot Plum). A distinct species from China. Growth erect; flowers small, white, appearing early in the spring. Fruit large, flattened, of the size and appearance of a nectarine, and of a brick-red color; flesh yellow, with a peculiar aromatic flavor.

Red June. J. The best Japan, ripening before Abundance. Medium to large; deep vermilion red, with handsome bloom; flesh light lemon yellow, firm; moderately juicy; fine quality. Tree upright, spreading, vigorous and hardy; productive. Ripens between Willard and Abundance. Highly recommended by Professor Bailey, of Cornell University. Last of July or early August.*

Reine Claude de Bavay. D. (Bavay's Green Gage). Large, greenish yellow, spotted with red; firm, juicy, sugary and of fine quality; very productive. September.

Satsuma. J*. (Blood Plum). Native of Japan. The tree looks much like the Wild Goose, and is likely to prove more hardy than Kelsey. The fruit has a pleasant flavor, and, unlike, all others, has red flesh, with a remarkably small stone.

Shipper's Pride. D. Large, nearly round; dark purple; quite juicy, sweet; splendid shipper and marketer; moderate grower; productive. Originated in northwestern New York.

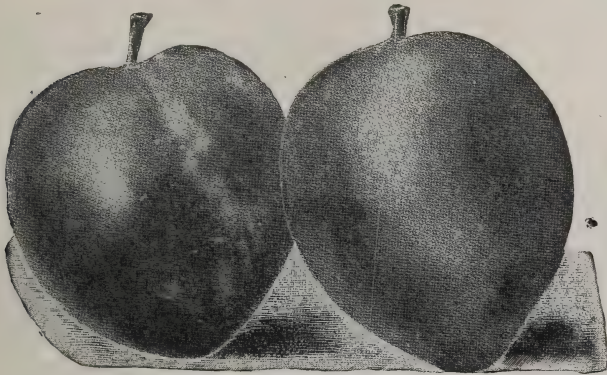
Washington. D. Large, green, somewhat reddened; juicy, sweet and fine; very productive. Last of August.

Wickson. J*. Originated by Mr. Burbank, who says: "Among the many thousand Japan Plums I have fruited, so far, this one stands pre-eminent. A sturdy, upright grower, productive almost to a fault. Fruit remarkably handsome, deep maroon red, covered with white bloom; stone small; flesh fine texture, firm, sugary and delicious. Excellent keeper and shipper."

Weaver. A. This remarkable plum was found near Cedar Rapids, Iowa, growing in the old Indian camping ground. Flesh firm, with flavor resembling the apricot. As a substitute for the peach it has no rival. Curculio-proof.

Wild Goose. A. An improved variety of the Chickasaw, evident in the great vigor of the tree and increased size of the fruit, which is nearly as large as the Green Gage. Skin purple, with a bloom; flesh juicy, sweet and adheres to the stone. Last of July.

Yellow Egg. D. (Magnum Bonum, Yellow). A very large and beautiful egg-shaped yellow plum. A little coarse, but excellent for cooking. Tree a free grower and very productive. End of August.



RED JUNE.

Wild Goose. Its large size, good quality and extreme earliness make it very valuable. A strong grower; productive.

Moore's Arctic. D. Size medium, purplish black, with a thin blue bloom; flesh greenish yellow, juicy, sweet and of pleasant flavor. Charles Downing speaks of it as follows: "A new hardy Plum, which originated in the highlands of Aroostook County, Maine, where unprotected and exposed to cold, it has for many years borne enormous crops, and is claimed to be the hardiest plum grown, and so far free from black-knot." Tree healthy, vigorous. An early and abundant bearer.

Peach. D. Very large and handsome; dull red; good; very productive. Last of August.

Pond's Seedling. See Hungarian Prune.

Pottawattamie. A. A cross of Chickasaw and Swedish Sloe. Quality excellent; an im-

PRUNES (*Prunus*)

The plum of history is the *Prunus domestica*. It also gives us the Prunes which are characterized by sweet, firm flesh, and capable of making a commercial dried product. They may be of any color, although blue-purple ones are best known. Any plum which can be successfully cured, without removing the pit, into a firm, long-keeping product, may be used for making Prunes, the chief requisite being a large proportion of solids, more especially sugar.

We follow the distinction made between Plums and Prunes, as is common in the horticultural literature of the Pacific coast. By the term "Prune," is signified a plum which dries successfully without the removal of the pit and produces a sweet, dried fruit, though in the confusion of our nomenclature, not even this broad classification is faithfully followed. For example we have the "Hungarian Prune" as a local traditional name for "Pond's Seedling Plum," which has no value as a Prune, and we have also "Coe's Golden Drop Plum," which does answer the requirements for a dried Prune, and is sometimes given fancy names by packers.

We do not, however, in this catalogue, attempt to correct the classification, but follow the popular arrangement. To such proportions has the Prune industry grown in the past dozen years that it may now be classed as one of the most important productions of the Pacific coast, the exportations annually to the Eastern markets reaching hundreds of millions of pounds of the finest Prunes in the world.

Dosch. D. Introduced by Hon. H. E. Dosch, after whom it is named. Originated near Portland, Oregon, about ten years ago. Color purple, very large; flesh juicy, delicious, sweeter than the Italian, but not so sweet as the Petite; flavor excellent, and for canning has no equal; dries very heavy. Tree hardy, thrifty grower, ten days to two weeks earlier than the Italian. Received a gold medal at Omaha Exposition in 1898, both in green and dried states.

Fellenberg. See Italian Prune.

French. See Petite.

German Prune. D. A large, long, oval variety, much esteemed for drying; color dark purple; of very agreeable flavor. September.

Giant Prune. D. (California). One of the largest Prunes known, the fruit averaging one and one-half to two ounces each. Its unequaled size, handsome appearance, rare keeping qualities and great productiveness make it desirable for home use or market. September.

Golden. D. A seedling of Italian Prune. Originated in Oregon. Light golden color, good flavor, and heavy drier; strong grower and abundant bearer; freestone. September.

Hungarian Prune. D. (Grosse Prune, or Pond's Seedling Plum). Very large, dark red, juicy and very sweet. Its large size, bright color, productiveness and shipping qualities render it a profitable variety for home or distant markets. September.

Imperial. D. (Epineuse). Large size, light or reddish purple color; thin skin; sweet and high flavor. Tree stout, stocky, rapid grower.

Italian. D. (Fellenberg). A fine late prune; oval; purple; flesh juicy and delicious, parts from the stone; fine for drying. Tree very productive. September.

Petite d'Agen. D. (French Prune). The well-known variety so extensively planted for drying. Medium size; reddish purple; juicy, sugary, rich and sweet. Bears immense crops. September.

Pacific. D. Originated at Mt. Tabor, Oregon. Tree hardy; borne abundantly since three years old. Fruit freestone, very large and handsome. Flavor the finest; rich, sugary and luscious. A good shipper. The best of drying Prunes.

Robe de Sargent. D. A variety lately introduced from France. It is this which in a dried state forms the celebrated "Pruneau d'Agen." Fruit medium size, oval; skin deep purple, approaching to black



ITALIAN PRUNE PLUM.

PRUNES—Continued

and covered with a thick blue bloom; flesh greenish yellow, sweet and well flavored, sugary, rich and delicious, slightly adhering to the stone. A valuable drying and preserving variety. Ripens in September.

Silver. D. Originated in Oregon and said to be a seedling from Coe's Golden Drop, which it very much resembles; is much more productive and tree more vigorous. The fruit, on account of its large size, is ranked among the most valuable prunes and drying plums. October.

Splendor. D. Large, very long in shape; clear even purple; turns quite black in curing. Cooked has a slight acid flavor.

Sugar. Originated by Luther Burbank. Ripens 28 days earlier than French (Petite d'Agen). Almost one-fourth sugar (analysis shows it to be 23.92 per cent sugar). Three times larger than French, of which it is a seedling.

On account of its earliness, large size and high per cent of sugar, it is sure to revolutionize the Prune industry of the world. Tree vigorous, hardy and very productive; bears young. Color purple; good shipper. August.

Tennant. D. Originated in Whatcom County, Washington, where it has been tested for 20 years, and has never failed to produce a good crop of fruit. Large, dark purple, with a blue bloom; flavor of the highest quality; rich, sugary and delicious. Tree hardy and very productive. Bears transportation well. August.

Tragedy. D. This most valuable of all Prunes for early Eastern shipments appears to be a cross between the German Prune and the Purple Duane; medium size, nearly as large as Duane; skin dark purple; flesh yellowish green, very rich and sweet; freestone. Ripens in July.

PEACHES (*Prunus Persica vulgaris*)

To secure healthy, vigorous and fruitful trees, the ground must be well drained and kept clean and mellow, and it should receive an occasional dressing of wood ashes. It should be remembered that Peaches are all borne on wood of the previous season's growth, and that this makes it absolutely necessary to prune the trees yearly, to remove dead branches and to let in light and air; keep the trees in good shape to produce bearing wood. F., freestone; S. C., semi-cling; C., cling.

Admiral Dewey. F.

Skin deep orange-yellow, with crimson cheek; flesh clear yellow, of uniform color and texture to the stone; juicy, melting, vinous; quality very good. Ripens with Triumph; has better form and brighter color on surface; equally hardy and productive; tree a strong and symmetrical grower. One of the best early freestones.

Alexander's Early (Alexander). C.

Originated near Mt. Pulaski, Ill. Medium size, skin greenish white, nearly covered with rich red; flesh

melting, juicy, sweet; tree vigorous and productive. Ripens two weeks earlier than Hale's Early.

Banner. New. F. Originated at Woodslee, Ontario. The original trees have borne sixteen crops, several years bearing well when all other varieties in Ontario failed. Tree very hardy both in wood and bud, bears young and very productive, equaling the prolific. Fruit large, deep yellow, with crimson cheek; flesh yellow to the pit; firm, rich and



ALEXANDER.

of excellent quality; pit small, free; equal to any as a shipper or keeper. Prof. W. W. Hilborn, director of the Experimental Station at Leamington, Ontario, has known it for many years, fruited it for several seasons in experimental orchard, and recommends it as the very best late market variety. Last of September and October.

Bokhara. F. A Russian variety, which is claimed to be the hardiest peach grown; in fact, it has withstood a temperature of 28 degrees below

zero without injury. It is a beautiful yellow peach, with bright red cheek; perfect freestone; delicious flavor; its exceedingly tough skin makes it a splendid shipper.

Briggs' Red May. F. Originated with J. B. Briggs, of Marysville. Fruit medium to large; skin greenish white, with rich red cheek; flesh greenish white, melting and juicy. A standard early variety and one of the most extensively planted in California. Middle of June.

PEACHES—Continued

California Cling. C. Very large, round, regular; orange, nearly covered with dark rich red; flesh deep yellow; flavor delicate, rich, vinous. Middle of August.

Carman. F. Large, resembling the Elberta in shape; creamy white or pale yellow, with deep blush; skin very tough; flesh tender and of fine flavor; juicy; prolific bearer. Profitable market variety. Ripe June 20.

Champion. F. A particularly hardy seedling of Old Mixon, from the West, which is noted for the hardiness of its blossoms, thus insuring a good yield in spite of heavy spring frosts. It is a very large, handsome peach, with a creamy white skin and beautiful red cheek. In flavor it is exquisite, and is a true freestone. Ripens the middle of July.



CHAMPION.

Chinese Cling. C. Large, globular; skin white, shaded with light red; flesh white, red at the stone; very juicy, melting and rich. July.

Crawford's Early. F. A magnificent large, yellow peach, of good quality. Tree vigorous and very productive. Its fine size, beauty and productiveness make it one of the most popular sorts; no other variety has been so extensively planted.

Crawford's Late Melocoton. (Late Crawford). F. Fruit of large size; skin yellow, or greenish yellow, with dull red cheek; flesh yellow; tree vigorous, moderately productive. One of the finest late sorts. Last of September.

Crosby. F. An iron-clad peach. The tree is of low, spreading, willowy habit of growth, similar to Hill's Chili, Wager and others of that class of hardy peaches. However, it is even more dwarf than these, and often the entire product of a tree, two bushels, or even more, can be picked by a man standing on

the ground. The fruit is of medium size, roundish in form, slightly flattened, with a distinct seam on the blossom end; bright orange-yellow, splashed with streaks of carmine on the sunny side; of beautiful appearance, and not so acid as most yellow peaches of the Crawford class. It ripens between Early and Late Crawford or about with Old Mixon. A good family peach at all times, and on account of its beautiful color, will command a ready sale alongside of the best standard sorts, in a season of abundance. However, when it is considered that its fruit-buds are so hardy as to withstand the frosts of winter and spring, that often kill all other good varieties, its special value is apparent; a fine yellow peach to supply the market when there are no others.

Dewey. See Admiral Dewey.

Early Charlotte. F. An improved seedling from Early Crawford, originated at Salem, Oregon, in 1878, by O. Dickenson, where it has attracted much attention among fruit-growers. This remarkable peach succeeds in Oregon, where many other varieties fail. Flesh yellow, melting and juicy, with a rich and excellent flavor. Freestone. Ripens ten days after Crawford's Early.

Early Imperial. F. Originated by W. W. Smith, Vacaville. Fruit large, deep yellow, with dark red cheek; flesh rich, juicy and very firm. A very highly colored peach and remarkable for its firmness. Resembles Yellow St. John in form, but earlier, larger and more highly colored. Ripens with Hale's Early, and its rich color and earliness combined will make it one of the most profitable varieties for early shipment.

Elberta. F. Introduced from Georgia. A cross between Crawford's Early and Chinese Cling; very large; bright yellow, with a beautifully mottled red cheek; flesh yellow, juicy, sweet; tree a uniform and regular bearer and strong grower. Fruit very showy and a perfect freestone. One of the best market varieties, often selling at double the quotations of other peaches. Ripens last of July.

Everbearing. F. A remarkable peach, having the peculiarity of ripening its fruit successfully over a period of eight weeks. Creamy white, mottled and striped; flesh white, with red veins; juicy, rich and fine.

Fitzgerald. F. An improved Early Crawford, being fully equal to it in size, quality and color. The tree commences bearing young, is productive and one of the hardiest. Fruit large, brilliant color, bright yellow, suffused with red; flesh deep yellow, best quality. Early September.

Foster. F. Originated in Medford, Mass. Large, deep orange-red, becoming very dark red on the sunny side; flesh yellow, very rich and juicy, with sub-acid flavor, ripening earlier than the Early Crawford and superior in many points; flesh is firmer, without so much red at the stone, which is smaller; one

PEACHES—Continued

of the very best for drying, market or canning.

Globe. F. Large, flesh firm, juicy, yellow; quality good, pleasant, rich, vinous and luscious. October.

Greensboro. S. C. Origin, North Carolina. Ripens with Alexander, but much larger. Round, flesh white, very juicy, of good quality; bright red over yellow, highly colored in the sun. A promising market variety.

Hale's Early. S. C. Medium size; greenish white, with red cheek; first quality. Tree healthy, good grower and productive. One of the earliest good peaches we have, and promises to be a leading orchard variety.

Heath Cling. C. A most delicious cling. Very large, skin downy, creamy white, with faint blush of red; flesh white, slightly red at the pit; very tender, juicy and sweet; valuable for canning; season early September.

Henrietta Cling. See Levy Late.

Imperial. See Early Imperial.

Indian Cling (Indian Blood). C. Large deep claret color, with red veins; downy; flesh red, very juicy and refreshing. Highly valued by all lovers of Indian Peaches. Last of August.

Lemon Cling. C. A very large and beautiful lemon-shaped variety; skin light yellow, reddened in the sun; flesh firm, yellow, rich, with a vinous, sub-acid flavor. Ripens first week in August.

Levy's Late, or Henrietta Cling. C. A magnificent cling of large size; skin a deep yellow, a shade of rich brownish red in the sun; flesh deep yellow, firm, juicy, sweet, half-melting, slightly vinous. Latest of all clings and highly esteemed for canning and market. Middle of September.

Lovell. F. A California seedling; large, almost perfectly round; flesh yellow to the pit, firm and of excellent quality; a superb canning, shipping and drying peach; tree a good grower and bearer. Worthy of extensive cultivation; ripens a few days after Muir.

McDevitt's Cling. C. Originated with Neal McDevitt, of Placer County, Cal. Very large, rich, golden yellow, becoming quite red when ripe; flesh yellow, firm and of superior flavor; excellent shipper. Last of August.

McKevitt's Cling. C. A California seedling, introduced by A. McKevitt, Vaca Valley. White; flesh firm, rich, sugary and highly flavored; white to the pit; excellent for shipping and canning. Tree a remarkably strong grower and not subject to curl. Early in September.

Mountain Rose. F. Large, handsome, red cheek; flesh white, juicy; one of the best. August.

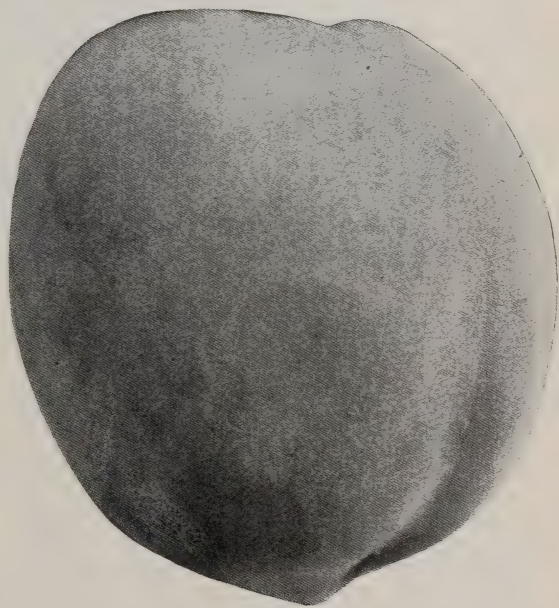
Muir. F. Large; pale yellow; very firm flesh; very sweet. Best for drying.

Newhall. F. Originated with Sylvester Newhall, of San Jose. A superb peach, of very large size; skin yellow, with a dark red

vinous flavor; ripens about one week before Crawford's Late; tree very hardy, healthy, vigorous and not affected by curl like Crawford's Late.

Orange Cling. See Runyon's Orange Cling.

Perfection. F. This new and valuable peach originated about three miles above Weston, Umatilla County, Oregon, near the timber line of the Blue Mountain Range, at a high altitude, which proves its hardiness. The fruit is of the largest size, yellow, with a beautiful blush cheek. The flesh is thick and very fine grained, yellow, with red around the pit, which is nearly as small as a prune seed. Its tough skin, firm flesh and good keeping qualities place it in the lead for a good shipping and market variety. We cannot recommend this new peach too highly to our friends and patrons. Ripens from September 10 to 15.



ELBERTA (See Page 32).

Phillip's Cling. C. Fine, large; yellow; flesh firm, clear yellow to the pit, which is very small. Preferred by canners to any other variety of cling. Its firmness, fine texture of flesh and lateness, not ripening until September, when other clings are practically harvested, makes a demand for this variety far beyond the supply.

Prolific. (New). F. Large, attractive, firm; color yellow, crimson cheek; flesh yellow to pit, very firm; pit small; very productive, and one of the hardiest peaches known. September.

Runyon's Orange Cling. C. Originated with Mr. Sol Runyon, on the Sacramento River. Fruit very large, yellow, with a dark crimson cheek; flesh golden yellow, rich and sugary, with a vinous flavor; tree an immense bearer, and not subject to mildew like the common sort; a splendid fruit for shipping, canning or drying; early in August.

PEACHES—Continued

Salway. F. Fruit large, roundish; deep yellow, with a rich, marbled, brownish red cheek; flesh yellow, firm, juicy, rich and sugary. A new English variety; promises highly as a late showy market sort.

Sellers'. C. A variety of Orange Cling, of the largest size, raised by Mrs. Sellers, of Antioch; skin fine yellow, with a dark red cheek; flesh yellow, firm, very juicy and rich; a very desirable sort for canning, ripening a few days after Runyon's.

Sneed. S. C. It is claimed for this peach that it is fully ten days earlier than the Alexander, of same size and appearance, but more yellow; flesh tender, juicy, melting and delicious; clings slightly to the pit; said to be the first peach to ripen.

Strawberry. F. Medium size; white, marbled with dark red; flesh white, red near the pit; juicy, with a rich, delicious flavor. July.

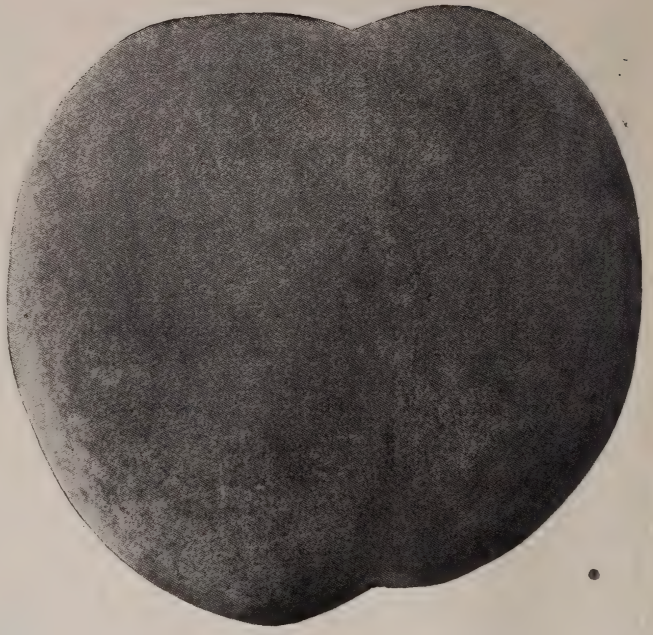
Susquehanna. F. A large, handsome variety, nearly globular; skin rich yellow, with beautiful red cheek; flesh yellow, sweet, juicy, with a rich, vinous flavor.

Triumph. S. C. Above medium; skin downy, dark orange-yellow, nearly covered with dark carmine; flesh yellow half way to the stone, where it changes to greenish white and adheres to the stone like Alexander; juicy, melting and slightly sub-acid; quality good. Maturity June 15. The great value of this peach for shipping purposes is its yellow color and attractive appearance, it being the earliest peach so far known, and has brought very high prices.

Tuskena Cling (Tuscan, Yellow Tuscan). C. A very large, yellow cling, the earliest fine cling; flesh juicy and of fine flavor and clear yellow to the stone. A good shipping and canning peach and very desirable on account of its earliness, ripening with the Early Crawford.

Twenty-Ounce Cling. C. A fine, very large cling peach, very desirable for canning, August.

Wager. F. Large; yellow, more or less color in the sun; juicy and of a fair flavor. While high quality and great beauty cannot be claimed for this fruit, the trees have such remarkable vigor and vitality that they not only produce fruit in great quantities, but produce it with a degree of certainty and regularity which is quite unusual. These



SALWAY.

facts commend it to all planters for market purposes. Last of August.

Waterloo. S. C. Originated at Waterloo, N. Y. Of medium to large size; color whitish green, marbled with red, deepening into dark purple-crimson in the sun; flesh greenish white, with an abundance of sweet, vinous juice, adheres some to the stone, like Amsden, Hale's Early, etc. Ripened at Waterloo, July 14, 1878; in 1879, three or four days ahead of Alexander. For so early a peach it is a remarkable keeper, ripe specimens having been kept in perfect condition for nearly a week. This makes it valuable for shipping.

Wheatland. F. Large, roundish; skin golden yellow, shaded with crimson on the sunny side; flesh yellow, rather firm, juicy, sweet and of fine quality; tree vigorous. August.

Wonderful. F. A freestone; color rich golden yellow, overspread with carmine. It ripens after nearly all other varieties have disappeared, and is a remarkable keeper. The tree is wonderfully prolific.

Yellow St. John. F. Fully one week earlier than Early Crawford; a trifle smaller than latter, especially old trees; yellow, with deep red cheek; juicy, sweet and highly flavored; quite free.

APRICOTS (*Prunus Armeniaca*, or *Armeniaca vulgaris*)

Beautiful and delicious fruit. In quality and appearance is between the plum and the peach, combining qualities of both. Ripening early, together with its delightful flavor, makes it one of the most valuable fruits. Tree is as hardy as the peach. Requires about the same cultivation as the peach or plum. It ships well and commands a good price in the Eastern market. For drying and canning it has no superior. The Russian varieties are quite distinct from the other European sorts; much hardier, earlier bearers and productive.

Alexander. Very hardy and immense bearer; fruit large, yellow, flecked with red; very beautiful, sweet and delicious. July.

Alexis. Very hardy and abundant bearer; yellow, with red cheek; large to very large; slightly acid, rich and luscious. July.

APRICOTS—Continued

Blenheim. Large, oval; flesh full to the pit; yellow, rich and juicy; ripens evenly and soon after the Royal; regular and prolific bearer; profitable for canning, drying and marketing.

Gibb. Tree hardy, grows symmetrical, productive. Fruit medium; yellowish, sub-acid, juicy and rich. The best early variety, ripening soon after strawberries. A great acquisition.

Hemskirk. Large, roundish, but considerably compressed or flattened on its sides; orange, with red cheek; flesh bright orange, tender; rather more juicy and sprightly than the Moorpark, with a rich and luscious plum-like flavor. July.

J. L. Budd. Tree a strong grower and profuse bearer. Fruit large, white, with red cheek, sweet, juicy, with a sweet kernel, as fine-flavored as an almond. The best late variety and a decided acquisition. August.

Moorpark. One of the largest, orange, with a red cheek; firm, juicy, with a rich flavor; very productive. August.

Nicholas. Tree hardy and prolific. Fruit medium to large, white, sweet and melting. A handsome and valuable variety. July.

Peach (Marysville Peach). Very large, handsome and of delicious flavor; skin deep orange, mottled with dark brown; flesh of a fine saffron-yellow color; juicy, rich and high-flavored. One of the best. August.

Royal. Large, oval, slightly compressed; yellow, with orange cheek, faintly tinged with



APRICOTS.

red; flesh pale orange, firm and juicy, with a rich, vinous flavor; exceedingly productive. July.

Tilton. (New). We have pleasure in introducing this Apricot to the public. Its large size, rich Apricot color, high flavor, uniform ripening, sure and unusual productiveness, with frost-resisting qualities and vigorous growth, easily place it far in advance of all other varieties. For drying or canning it is much superior to any of these older varieties.

QUINCES (*Cydonia vulgaris*)

The Quince is, of late, attracting a good deal of attention as a market fruit. Scarcely any fruit will pay better in the orchard. The tree is hardy and compact in growth, requiring but little space. Productive, gives regular crops and comes early into bearing. The fruit is much sought after for canning for winter use. When put up in the proportion of about one quart of quinces to four quarts of other fruit, it imparts a delicious flavor. Especially desirable for jellies and preserves.

It flourishes in any good garden soil, which should be kept mellow and well enriched. Prune off all the dead and surplus branches and thin out the fruit if bearing too freely

Apple, or Orange. Large, roundish; bright golden yellow; cooks tender and is of very excellent flavor. Valuable for preserves or flavoring; very productive. The most popular and extensively cultivated of the old varieties. October.

Angers. Somewhat later than the preceding. Fruit rather more acid, but looks well. Tree a thrifty grower and abundant bearer.

Bourgeat. A French variety. Very productive, healthy and thrifty. It grows in tree form, like pears or plums. It has almost perfect foliage, leaves green and fresh until the end

of the season. The fruit is very large, smooth, golden yellow, of the best quality, tender; ripens just after the Orange and will keep past midwinter in perfect condition.

Champion. Fruit very large, fair and handsome. Tree very handsome, surpassing other varieties in this respect, bears abundantly while young; flesh cooks as tender as an apple and without hard spots and cores; flavor delicate, imparting an exquisite quince taste and odor to any fruit with which it is cooked. One of the most valuable.

QUINCES Continued

Orange. See Apple.

Pineapple. Originated by Luther Burbank. The name comes from the flavor, which is suggestive of the pineapple. The fruit in form and size resembles the Orange Quince, but is smoother and more globular. Makes a superior jelly. Can be eaten raw and is said to cook as tender in five minutes as the best cooking apple, possessing a most exquisite and delicious flavor not equalled by any other quince.

Luther Burbank says: "Quinces can probably be grown with less expense than any other fruit, and if the quality can be improved, would be extensively grown and more generally used. A more promising fruit for improvement cannot be named. For about fifteen years we have been working

in this direction and have succeeded in obtaining the Pineapple, a quince which will cook as tender in five minutes as the best of cooking apples, and with a flavor never before equaled. Jelly made from it is superior to that made from any other known fruit—absolutely unapproachable—something which could never have been thought of until it was brought into existence. The fruit, in form and size, very much resembles the Orange Quince, but is smoother and more globular; in color much lighter yellow; average weight about three-quarters of a pound each. The tree is a strong grower and as productive as the Orange. Some one may produce a better quince; we never expect to."

Rea's Mammoth. A seedling of the Orange Quince; one-third larger, of the same form and color; fair, handsome; equally good and said to be as productive. Tree a hardy and healthy grower.

NECTARINES (*Prunus Persica*, or *P. laevis*)

A most delicious, smooth-skinned fruit, which thrives wherever peaches will grow. Much superior to the peach as a dried fruit, and excellent for preserves. Commands a high price in the Eastern market, as it is considered as somewhat of a novelty.

Boston. Very large and handsome; deep yellow, with a bright blush and mottles of red; flesh yellow to the stone, sweet, with a pleas-

ant and peculiar flavor; freestone. One of the most valuable sorts for market.

Early Violet (Violet Hative). Medium size; yellowish green, with a purple cheek; flesh pale green, melting, rich and highly flavored; freestone. August.

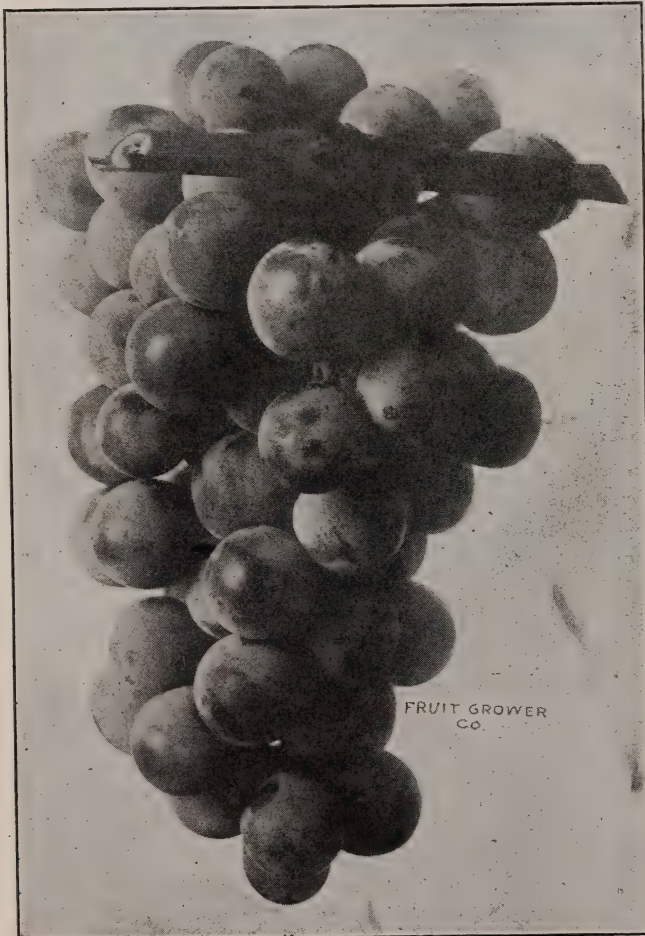
Lord Napier. Large, cream-color, dark red cheek; flesh white, tender, juicy and sugary; freestone. July.

New White. Large, white, nearly round; flesh white, tender, very juicy, with a rich vinous flavor; stone small and separates freely. August.

Stanwick. Very large, often as large as a peach; skin pale greenish white shaded into deep rich violet in the sun; flesh white, tender, juicy, rich, sugary, and delicious. For drying and shipping not excelled by any other variety. August.

GRAPES (*Vitis*)

The Grape is the most beautiful of all fruits and the most highly esteemed for its many uses. It can be secured by every one who has a garden, yard or a wall. It can be confined to a stake, bound to a trellis, trained over an arbor, or extended until it covers a large tree or building, and it still yields its graceful bunches and luscious, blooming clusters. Capable of most extraordinary results under wise management, it is prone also to give the greatest disappointment under bad culture or neglect. Other fruits may be had from plants that know no care, but Grapes are only to be had through attention and forethought. We will endeavor to point out a few essential points in its successful culture and refer the cultivator to other and more extended works for more details.



GRAPES—Continued

Grape culture is of the greatest commercial importance on the Southern Pacific coast. We grow vines in the North for our northern trade and in California for our southern trade, thereby securing vines best adapted for each locality, many of the foreign varieties being grown almost exclusively for the southern trade, and for the north or localities in which foreign varieties are not adapted, we grow American varieties which are suited to the locality.

DISTANCE—In setting out vines, the character and strength of the soil is a very important point to be considered, 8 by 8 and 8 by 10 being the popular distances, 10 by 10 and 10 by 12 for the more robust growers.

SOILS—Good Grapes may be grown on any soil, sandy, clayey, loamy, etc., that is not too shallow or too heavily pregated with alkali. The soil must be well drained, and there should be a free exposure to the sun and air. Hillside unsuitable for other crops are good places for Grapes.

CROPS—Crop Grapes moderately, if you would have fine, well-ripened fruit. A vine is capable of bringing only a certain amount of fruit to perfection, proportioned to its size and strength; but it usually sets more fruit than it can mature. Reduce the crop early in the season to a moderate number of good clusters and cut off the small, inferior bunches; the remainder will be worth much more than the whole would have been. A very heavy crop is usually a disastrous one.

PRUNING—Annual and careful pruning is essential to the production of good Grapes. If the roots are called upon to support too much wood, they cannot bring to maturity a fine crop of fruit. The pruning should be done in November, December, February or March, while the vines are entirely dormant.

GATHERING AND KEEPING—Grapes for keeping to be used in their fresh state should be allowed to remain upon the vines until perfectly matured, but not much longer. Pick them when perfectly dry. Let them stand in open baskets or boxes for about ten days, in a cool, dry room; and after sorting out all decayed and imperfect berries, pack them in shallow boxes and cover closely. Use no paper but basswood or elm boxes, if convenient. Pine and other resinous woods should not be used, as they flavor the fruit disagreeably. After packing, keep the boxes where it is both cool and dry. Under careful management some varieties may be kept until spring. B., black varieties; R., red or amber; W., white.

AMERICAN VARIETIES

Alice. R. A new red Grape of very vigorous growth and hardiness, in quality fully equal to Delaware by actual test. Ripening with or before Concord, and keeping in perfect condition, without cold storage, throughout the winter. It does not shell, and under suitable conditions will raisin instead of rot. Vine very productive. Awarded a first class Certificate of Merit by the Massachusetts Horticultural Society, Boston, Mass., October, 1895.

Brighton. R. A cross between Concord and Diana Hamburg. Resembles Catawba in color, size and form of bunch and berry; flesh rich, sweet and of the best quality. Ripens earlier than Delaware. Vine vigorous and very hardy. This variety has been thoroughly tested, and it may now be truly said to be without an equal among early grapes.

Campbell's Early. B. Its strong, hardy, vigorous growth, thick, heavy, perfectly healthy foliage, very early ripening and abundant



GREEN MOUNTAIN (See Page 38).

bearing of large and handsome clusters of excellent quality, combined with the most remarkable keeping and shipping qualities, form a combination unequalled by any other grape. Its period of full maturity is from the middle to the last of August, according to the season. Ripening with Moore's Early, but, unlike that variety, it has kept sound and perfect, both on and off the vine, for weeks after Moore's Early was decayed and gone. In dessert quality it is unrivaled by any of our present list of first-early market grapes. It is, both as to cluster and berry, of large size, of a glossy black color, with a beautiful blue bloom; pulp sweet and juicy, free from foxiness; seeds small, few in number and part readily from the pulp.

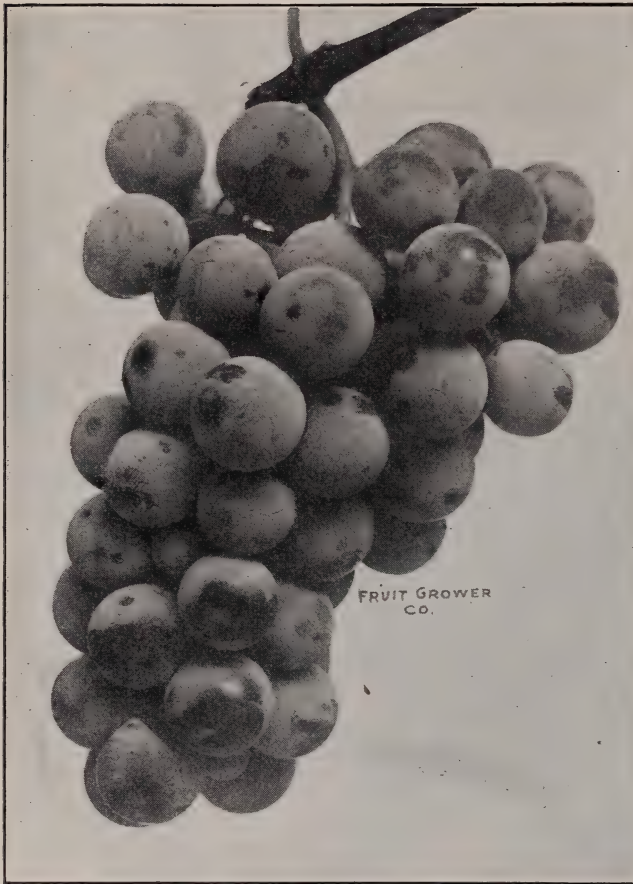
Catawba. R. Well known as the great wine grape of Ohio, Kentucky, etc. Bunches large and loose; berries large, of a coppery red color, becoming purplish when well-ripened; requires the most favorable soils and

GRAPES—Continued

situations, good culture and warm seasons to mature perfectly. Last of September.

Concord. B. A large, handsome grape, ripening a week or two earlier than Isabella; very hardy and productive. Succeeds over a great extent of country, and, although not of the highest quality, it is one of the most popular market grapes.

Delaware. R. Still holds its own as one of the finest grapes. Bunches small, compact, shouldered; berries rather small, round; skin thin, light red; flesh very juicy, without any hard pulp, with an exceedingly sweet, spicy and delicious flavor. Vine moderately vigorous, hardy and productive. Ripens two weeks before the Isabella.



WORDEN. (See page 39)

Early Ohio. B. Very early, hardy and productive; strong, thrifty grower; good-sized bunch; berry smaller than Concord; adheres firmly to the stem. A profitable early market sort.

Eaton. B. Seedling of the Concord. Bunch and berries of largest size, showy and attractive; leaf large, thick and leathery; berries round, covered with heavy blue bloom; pulp tender, separating freely from the seeds.

Green Mountain (Winchell). W. This, the earliest white grape, has been thoroughly tested over a wide area, and has proved most satisfactory. It combines hardiness, fruitfulness, vigor, good size and excellent quality.

Bunch medium to large, shouldered; berries medium, greenish white; skin thin, tough; pulp tender, sweet, with few seeds; of excellent quality; free from foxiness, and the flavor is excellent, ranking in this respect as a grape of the first class. It is the first white grape to ripen, maturing even in the worst of seasons, a consideration which will be appreciated by all planters. Its habit of growth is vigorous and the foliage clean and healthy, while its bearing quality is all that can be desired. It is a most valuable white grape, either for the amateur or professional grower.

Hartford Prolific. B. Bunches rather large; berries large, globular; color almost black, covered with a beautiful bloom; of fair quality. Ripens three weeks before the Isabella; valuable for its abundant bearing and early maturity.

Isabella. B. An old standard sort, highly prized where it will thoroughly mature. Bunches long, large, loose; berries large, oval, sweet and musky. A good keeper.

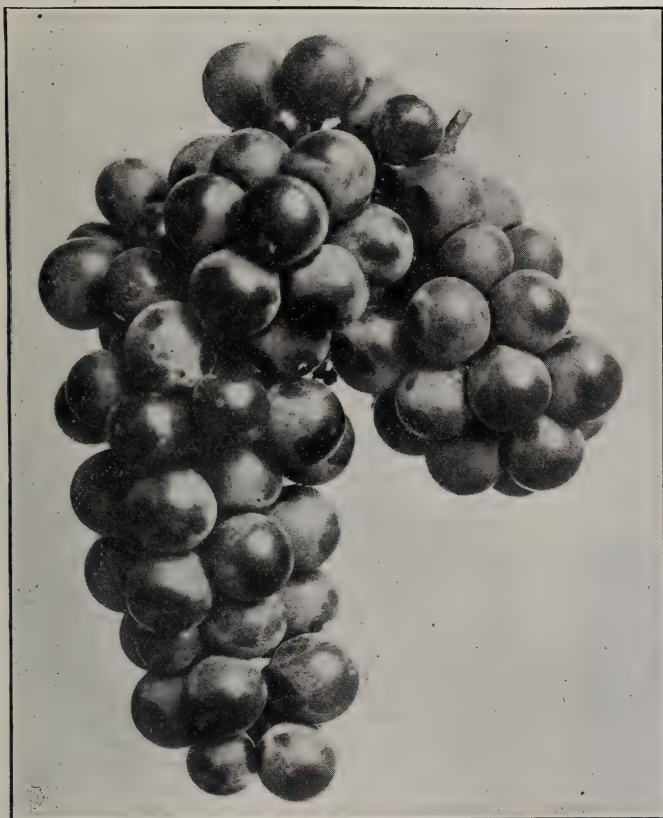
McKinley Early. New. W. It is with intense satisfaction that we introduce a new early white grape, of the Niagara type, which bids fair to add millions to the wealth of the nation, and which will be hailed with delight by fruit-growers, dealers and consumers throughout the world. Produced by Mr. Young, near where the Niagara originated. It is fully ten days earlier than the Niagara, and as strong a grower, with very rich flavor. A strong, vigorous grower, with thick, healthy foliage and perfect self-fertilizing blossom. Bunches large and compact, usually shouldered; berries large, nearly round, very sweet, with no acid around the seeds, and no puckery taste in the skin; skin thin, green at first, then turning to yellow when fully ripe, very tenacious, bearing handling and shipping. It has remarkable keeping qualities for an early grape and will hang on the vine sound and perfect for six weeks or more after ripening, with no tendency to shell off or fall from the stems. As good a shipper as any of the American grapes. For complete description and testimonials of our leading horticulturists, write for our two-page circular, giving full particulars.

McPike. B. This grand new variety was originated in south Illinois. Was awarded Wilder Silver Medal by the American Pomological Society, has taken first premium at Ohio, Illinois, Indiana and Missouri State Fairs. The McPike is a seedling of the Worden and partakes of all the good qualities of the Concord and Worden to a marked degree. Perfectly hardy, as easily grown as Concord or Worden, with a leaf unprecedented; it is earlier than the Concord; bunches large, even and compact, berries even in size, covered with a beautiful bloom, blue-black in color, ripens uniformly and has generally the appearance of the Worden. The berries are of mammoth size, rivaling Black Hamburg, being often three

GRAPES—Continued

inches in circumference and of superb quality—one of the best grapes grown. One berry measured $3\frac{5}{8}$ inches. The grape is almost perfection. Mr. McPike has sent the grapes to all parts of the country, and the comments are most favorable upon its wonderful size, flavor, hardness and beauty.

Moore's Early. B. A comparatively new grape raised from seed by John B. Moore, Concord, Mass., in 1872. It is described as follows: Bunch large; berry round (as large as the Wilder or Rogers' No. 4); color black, with a heavy blue bloom; quality better than the Concord; vine exceedingly hardy, has never been covered in the winter, and has been exposed to a temperature of more than twenty degrees below zero without injury to it; has been entirely exempt from mildew



CAMPBELL'S EARLY (See Page 37).

or disease. Its earliness makes it desirable for an early crop, and more particularly adapts it to New England, and the northern portion of the United States, maturing, as it does, ten days before the Hartford and twenty days before the Concord.

Moore's Diamond. W. A vigorous grower, with dark, healthy foliage, entirely free from mildew. A prolific bearer; bunches large, handsome and compact, slightly shouldered color delicate, greenish white, with rich, yellow tinge when fully ripe; skin smooth and free from specks; pulp tender, juicy and nearly transparent, with very few seeds; berry about the size of Concord; quality best, rich, sprightly and sweet, resembling the foreign Chasselas. Ripens about two weeks before Concord.

Niagara. W. Occupies the same position among the white varieties as Concord among the black; the leading profitable market sort; bunch and berries large, greenish white, changing to pale yellow when fully ripe; skin thin, but tough; quality much like Concord.

Pocklington. W. Originated at Sandy Hill, N. Y. Vine very vigorous, hardy and productive; bunch and berry of good size; color a light lemon-yellow; flesh moderately tender, sweet, with a peculiar aromatic flavor. The great vigor and hardness of the vine, with the beauty and size of the clusters, place this in the front rank of white grapes; ripens with Concord.

Salem (Roger's No. 22). R. A strong, vigorous vine; berries large, Catawba color; thin skin; free from hard pulp, very sweet and sprightly; ripens first of September.

Wilder (Roger's No. 4). B. Large and black; bunches generally shouldered; berry round and large; flesh buttery, with a somewhat fibrous center; sweet, rather sprightly.

Worden. B. This new variety is a seedling of the Concord, which it greatly resembles in appearance and flavor, but the berries are larger. The fruit is said to be better flavored and to ripen several days earlier.

Wyoming. R. Vines very hardy, healthy and robust, with thick, leathery foliage; color of berry similar to Delaware, but brighter, being one of the most beautiful of the amber or red grapes, and in size nearly double that of the Delaware; flesh tender, juicy, sweet, with a strong native aroma. Ripens before Delaware. Best early red for market.

FOREIGN VARIETIES

For Table, Raisins, Shipping and Wine.

Black Hamburg. B. A fine, tender grape, producing large, magnificent, compact bunches; berries black, very large and oblong. A great favorite everywhere, especially for table.

Black Malvoise. B. Vine a strong grower; berries large, oblong, reddish black, with faint bloom; flesh juicy, flavor neutral. An immense bearer, an excellent table as well as a wine grape.

Black Prince. B. Bunches very long, tapering; berries medium, ovate, with thick bloom; juicy and sweet.

Chasselas de Fontainbleau. See White Sweet-water.

Chasselas Golden. R. Bunches medium, compact; berries of an amber color, sweet and watery. Ripe latter part of July.

Cornichon Black. B. Bunches long and loose; berries oval, tapering at both ends; skin thick and dark, covered with bloom; flesh firm, with pleasant flavor; a desirable variety for shipping and marketing; ripens late.

FOREIGN GRAPES—Continued

Emperor. R. Vine a strong grower and heavy bearer; bunches very large, long and loose-shouldered; berries large, oblong, deep rose-colored, resembles the Tokay, covered with light bloom, firm; skin thick; one of the most profitable late varieties to plant for market; its firmness, good keeping qualities and rich color cause it to be in great demand in Eastern markets every year. Withstands rain better than any other variety. Does well on granite soil of the foothills. Should be staked to get best results.

Fehér Zagos. W. Vine a vigorous grower and immense bearer; very hardy and exceedingly productive in sandy and heavy soils; bunches large and compact; berries oval, yellowish green; good for wine or raisins.

Flame Tokay. R. Bunches very large and moderately compact; berries large; skin thick, pale red, covered with bloom; flesh firm, sweet; an old standard variety, always commands a good price in the Eastern markets, and as a table Grape is more extensively planted than any other variety.

Gordo Blanco. See Muscat.

Malaga. W. Vine a strong grower and immensely productive, thriving in almost any soil; bunches very large, often weighing ten pounds; compact, shouldered; berry very large, oval, yellowish green; skin thick, fleshy. One of the best shipping grapes, commanding a good price in the Eastern markets every season; makes a second quality raisin.

Mataro. B. One of the finest grapes for claret; good bearer and heavy grower. All the great French authorities agree in placing the Mataro as the finest red wine grape of the Southern regions.



MILLER (See Page 41).

Mission or California. B. A well-known variety. A strong, sturdy grower, bearing large bunches of black, medium-sized berries. Valuable for wine.

Muscat of Alexandria (Gordo Blanco). W. Bunches long and loose, shouldered; berry oval, sometimes round; yellowish green; skin thick; flesh with a decided Muscat flavor. This is the variety so extensively planted for raisins. The distinctive feature between the Alexandria and Gordo Blanco is supposed to be in the shape of the berries, the former being oblong and the latter round. On this coast, in most localities, the two varieties have been found to be so nearly identical, round and oblong berries being found on the same vine, that they are classed as Muscats, and no distinction is made by even the most experienced raisin vineyard-ists.

Rose of Peru. B. Vine a strong grower; bunch very large, shouldered, loose; fruit round, large, with firm and crackling flesh; a very handsome grape of fair quality, and highly esteemed as a market variety.

Seedless Sultana. W. Small, white grape, turning to amber; clusters large. It makes a fine raisin for culinary purposes, at the same time it is a fine wine grape. It is the only grape we know of that is good for both raisins and wine.

Thompson's Seedless. W. This is a new variety of great merit. It is perfectly seedless, and will doubtless become the most popular sort for seedless raisins. It is very attractive; larger than the Seedless Sultana, more oblong, and in color greenish yellow; resembles the Muscat. It is of good quality, claimed to be superior to the Seedless Sultana. It dries rapidly and evenly, and being so sweet, heavily. A strong grower and unusually productive.

Tokay. See Flame Tokay.

White Sweetwater (Chasselas de Fontainbleau). W. Bunches large and compact; berries medium size, round; skin thin, transparent, greenish yellow; pulp tender, juicy, sweet and richly flavored. One of the best early grapes.

Zinfandel. B. Bunches large, compact; berries round, dark purple. The most extensively planted grape in California for making claret.

RASPBERRIES (*Rubus*)

Plant in good soil and manure it from time to time freely. The hills should not be less than four feet apart each way, with two or three plants in a hill. Cut out the old and weak shoots each year, preserving not over six for fruiting. If the location is much exposed and the plants inclined to kill down seriously, they may be bent over in the fall on mounds of earth formed at one side of the hills and covered sufficiently to keep them down until spring. Surplus suckers take strength from the bearing plants. They should be cut away or hoed up often. Raspberries may be made very profitable with good cultivation.

RED AND YELLOW VARIETIES

Brandywine (Susqueco). Large, bright red; very firm. Valuable for market on account of its fine shipping qualities.

Cardinal. New. This wonderful berry is a surprise in the fullness of its merits—its great growth, its extreme hardiness and the exceeding productiveness of its choice red, rich, pure-flavored berries. It will pay. It is not a novelty, but a variety of great merit. The new Cardinal is claimed to grow ten feet high and bear in proportion. Leading horticulturists who have seen this berry say that it is one of the wonders of the century, so far exceeding all others as to put it entirely beyond comparison. Judge Wellhouse, president of the Kansas State Horticultural Society, said at a meeting of the society, that the introduction of the Cardinal Raspberry would add millions to the wealth of the farmers of the country because of its inherent great vigor and exceeding productiveness.

This most promising Raspberry is another natural product of Kansas. It is not a hybrid, but a result where nature combined its best in one little seed that produced the first Cardinal Raspberry plant. It also germinated that seed in its own way, not under the pet care of an expert gardener who could control the temperature, moisture, sunshine and weeds, but came up in a neglected clump of Gregg Raspberry bushes, and there showed its make-up by growing far above them and producing its great crop of red berries in contrast to the few Greggs beneath them. When first seen by the owner the Greggs were dug and the Cardinals had the room.

Columbian. An improvement on Shaffer's, which it resembles, but the berry is firmer, dark red, adheres to the bunch much longer and retains its shape better, both on the market and for canning. Bush a strong grower, attaining a very large size. One of the hardiest and wonderfully prolific. Unexcelled for productiveness and stands at the head for canning, making jam, jelly, etc.

Cuthbert (The Queen of the Market). Large, conical; deep, rich crimson; excellent quality. A vigorous grower, entirely hardy and immensely productive. "I regard it as the best raspberry for general culture."—Charles Downing. "Now regarded by careful and experienced horticulturists as the best raspberry in existence for general cultivation. I have it in a specimen bed with 25 other kinds, and it surpasses all others."—E. P. Roe.

Golden Queen. This variety is a seedling of the Cuthbert, but the color of the fruit is a rich golden yellow. The flavor is of the highest quality, pronounced by some superior to the old Brinkle's Orange, the finest flavored of all the raspberries. In size equal to Cuthbert; immensely productive. A very strong grower and hardy enough even for extreme northern latitudes, having stood uninjured even when the Cuthbert suffered. The desire for a yellow raspberry of high quality, combined with vigorous growth and perfect

hardiness is believed to be fully met in this variety.

Japanese (Wineberry). Ornamental both in fruit and plant. Canes covered with purplish red hairs; leaves dark green, silvery gray beneath. Fruit in large clusters and each berry at first tightly enveloped by the large calyx, forming a sort of bur, which is covered with purplish red hairs. These gradually open and turn back, exposing beautiful wine-colored fruit of medium size; brisk sub-acid, retaining flavor when cooked; highly esteemed for canning, preserves, jellies, etc.

Loudon. The best red mid-season berry. Its points of superiority are vigor of growth, large fruit, beautiful, rich dark crimson color, good quality and marvelous productiveness and hardiness, enduring winters without protection and without injury to the very tips. It stands shipping the best of any variety and will remain on bushes the longest without injury.

Marlboro. The largest early red raspberry, ripening only a few days after Hansell; beautiful bright scarlet, of good but not high quality; hardy and productive.

Miller's. Bright red color, which it holds after picking. Stout, healthy, vigorous grower; canes not as tall as Cuthbert; well adapted to carrying their immense loads of berries. Berries large, hold their size to end of season; round; bright red; cores small, do not crumble; firmest and best shipper; rich fruity flavor. Commences to ripen with the earliest. We can highly recommend this for either home or market.

Queen of the Market. See Cuthbert.

Susqueco. See Brandywine.

Turner (Southern Thornless). Very desirable as an early sort for the home garden. Berries good size bright crimson; sweet.



RASPBERRIES—Continued

BLACKCAPS

Cumberland. In size the fruit is simply enormous, far surpassing any other sort. The berries run from $\frac{7}{8}$ to $\frac{1}{2}$ of an inch in diameter, and are of such handsome appearance that the fruit has often sold for 10 cents per quart when other varieties were selling for 5 cents to 7 cents per quart. The quality is very similar and fully equal to Gregg. In spite of its unusually large size, the fruit is possessed of great firmness and is thus well adapted for standing long shipments. Mid-season. The bush is exceedingly healthy and vigorous, throwing up stout, stocky canes, well adapted for supporting their loads of large fruit.

Gregg. Of good size; fine quality; very productive and hardy. It takes the same position among blackcaps as Cuthbert among the red sorts. No one can afford to be without it. The standard blackcap by which others are judged.

Haymaker. New. A purple cap, not so dark as Columbian or Shaffer, and much larger and firmer than either of those varieties; never crumbles, and stands up well in shipping. Sample crates have been shipped to distant points with entire satisfaction. It is a berry to grow for either home use or market. The originator has found it the most profitable berry ever raised for market, and has never yet been able to supply the local demand. So much of a favorite has the Haymaker become that local growers have said that it has ruined the sale of other varieties. Very popular as a canning berry. Many orders for berries for this purpose are placed a year in advance. One writer located near a canning

factory has thus written: "If any one about here had several acres of it in bearing, he could dispose of the entire crop to good advantage to the canning factory."

Kansas. Strong, vigorous grower, standing extremes of drouth and cold, and bearing immense crops. Early, ripening just after Palmer. Berries size of Gregg; of better color; jet black, and almost free from bloom; firm, of best quality; presents a handsome appearance and brings highest price in market.

Mammoth Cluster. Large in size; next to Gregg. Canes of strong growth and very prolific. Berries large and of fine quality.

Munger. The fruit of Munger is black, and resembles Gregg very much. It is a better flavored berry than Gregg, tougher in texture, and therefore a better shipper. In size it excels Gregg by almost 25 per cent, being extra fine for canning and evaporating. In seasons when most others are dry and seedy, Munger ripens up sweet and juicy, and readily brings an advance of 50 cents per bushel over other kinds. The canes, too, resemble Gregg, are free from disease; upright in growth and extremely hardy.

Ohio. A very strong-growing, hardy sort; fruit nearly as large as Mammoth Cluster; more productive than any other variety and one of the most, if not the most valuable for market.

Souhegan (Tyler). A new variety, commended very highly as a market sort by those who have grown it. The bush is said to be enormously productive, perfectly hardy and free from disease of any kind.

Schaeffer's Colossal (Puthill). A strong-growing variety, producing berries of great size, excellent to dry, and unsurpassed for canning; flavor peculiar and fine.

BLACKBERRIES (*Rubus*, or *Rubus villosus*)

This excellent and profitable fruit should be planted, for garden use, in rows six feet apart, with plants four feet apart in the rows; for market, in rows eight feet apart, with plants three feet apart in the rows. Give the plants same cultivation as raspberries.



Early Harvest. A variety of great promise, being exceedingly early in time of ripening and always reliable. The canes are strong and upright in growth, branching stout and vigorously. Hardier than Kittatinny or Lawton; an enormous bearer. Berries sweet and of the highest quality, though not as large as some varieties.

Erie. Said to be the only large, productive, absolutely hardy blackberry yet introduced. Originated in northern Ohio. Free from rust and all other diseases, and wonderfully productive (exceeding even the prolific Lawton), bending the robust canes to the ground with the weight of fruit. Fruit very large, excellent quality, handsome and firm, and ripens exceedingly early; fruit uniform both in size and shape.

Eldorado. A new seedling from Preble County, Ohio. The vines are very vigorous and hardy, enduring the winters of the far Northwest without injury, and their yield is enormous. The berries are large, jet black, borne in large clusters, and ripen well together.

BLACKBERRIES—Continued

They are very sweet, melting and pleasing to the taste, have no hard core, and keep eight or ten days after picking with quality unimpaired, combining nearly all the good qualities found in a blackberry.

Evergreen. Introduced from Oregon; origin unknown; beautiful cut-leaved foliage, which it retains during the winter; berries large, black, sweet, rich and delicious. It continues to ripen from July to November, which makes it one of the best berries for family use; an excellent trellis and arbor plant.

Himalaya Giant. New. Vigorous grower; canes sometimes reaching 30 to 40 feet; must be trained on a trellis. Fruit large, black; very abundant bearer and excellent shipper; shape more round than Kittatinny or Lawton, more juicy and smaller seed. Mr. Brodie, Superintendent Experimental Station, Puyallup, states that it has yielded at the rate of 400 crates (9,600 quarts) per acre, and thinks it might be made to yield 600 crates per acre on proper soil.

Iceberg. This wonderful berry is the origination of the far-famed Luther Burbank, whose remarkable success in the production of valuable new plants has given him the title of the "Wizard of Horticulture." The fruit is white, transparent; the seeds, which are unusually small, can be seen in the ripe berries. The clusters are larger than those of Lawton; individual berries as large, but earlier, sweeter and more melting than Lawton. Like all blackberries, the Iceberg is slightly bitter when not thoroughly ripe.

Kittatinny. Large; black, sweet; soft when black; very hardy; ripens up gradually like Lawton. One of the best except in northern sections.

Lawton (New Rochelle). The well-known market variety.

Mammoth. New. Supposed to be a cross between the wild blackberry of California and the Crandall's Early. Grows entirely unlike any other blackberry plant known. It is a rampant grower, trailing on the ground and under favorable conditions will grow twenty feet in a season. The canes are large, of deep red color when exposed to the sun, the foliage is large, thick, of a deep green color. Enormously productive and exceedingly early, ripening three weeks before other cultivated kinds. Fruit enormous, specimens measuring $2\frac{1}{2}$ inches long; seed small, soft and abundant; core small, soft. In size and flavor said to surpass all other varieties of blackberries. We offer it to the public only after a most thorough test, covering a period of several years.

Mersereau. New. This early mammoth iron-clad blackberry is by far the most valuable variety that has ever appeared since the advent of the Wilson, over 30 years ago. It originated in northwestern New York, where the mercury falls from 15 to 25 degrees below zero, and where it has stood in open field culture for many years without the slightest protection, never being injured in the least. It has never had a leaf affected with orange rust, blight or other disease or produced a double or "rose" blossom.

In hardiness it is doubtless without an equal among blackberries, having endured a temperature of 20 degrees below zero without being injured in the least, even at the tips, although Snyder and Taylor's Prolific were much damaged. Just how low a temperature it will withstand uninjured is not known. The berries are brilliant, sparkling black throughout, and what adds great value to it as a market berry, it remains black under all conditions and circumstances, never turning red when gathered, in hot, muggy weather, after the manner of Snyder, Lawton, Erie and many other varieties. In qual-



LUCRETIA (See Page 45).

ity it is exceptionally sweet, rich, melting and luscious, being without core; the seedy character of Snyder and most other sorts is noticeably absent. As a shipper and keeper it is unsurpassed, remaining firm without bleeding in handling.

The canes are of exceedingly strong, upright habit, attaining upon fairly good soil a height of eight feet, if permitted to grow unchecked, and are so stout as to always remain erect; foliage large, deep green, abundant and entirely free from rust or blight. The yield is simply enormous, producing double the quantity of fruit per acre of the Snyder,

BLACKBERRIES—Continued

Kittatinny or Taylor's Prolific and affording heavy pickings from the first until the crop is all matured. Its season is early to mid-season, ripening with the Snyder, in advance of Kittatinny, Lawton, Taylor's Prolific or Erie, but not so early as Early Harvest or the Wilson.

Rathbun. Origin, western New York. A strong, erect grower with strong stem, branching freely; will root from tip of branches like a raspberry. Hardy, having endured 20 degrees below zero and produced a good crop. Forms a neat, compact bush 4 to 5 feet high, producing its immense fruit abundantly. Fruit is sweet and luscious without hard core, of extra high flavor, jet-black, small seeds, firm enough to ship and handle well. Very large size, resembling the Wilson and fully equal to that grand variety, with the addition of hardness.

Snyder. Extremely hardy, enormously productive; medium size, no hard, sour core; sweet and juicy. The leading variety where hardness is the consideration. Ripens early.

Ward. New. It was found growing in the fence-row adjoining a plantation of Wilsons, on the Michael Ward farm in Monmouth County, New Jersey. Its fine fruit, healthy canes and very prolific bearing qualities attracted the attention of the owners. A few plants were removed to a position where it could be cultivated and planting extended from year to year, as fast as the sucker plants allowed, where it has been fruiting for several years, canes never winter-killing, bearing a crop every year, and the fruit coming into competition in the market with all other varieties, and always commanding the highest price and producing twice as many bushels per acre as the Wilson alongside (and as many bushels per acre as the Wilson when in its prime). The Ward Blackberry is undoubtedly a seedling of the Kittatinny, which it closely resembles, having all the good qualities of the parent, with none of its defects. The Ward is a very strong grower, perfectly hardy (in New Jersey), the fruit black throughout and very prolific. For complete description, send for four-page circular.

BLACKBERRY-RASPBERRY (HYBRIDS)

Logan Berry (Raspberry-Blackberry). Judge J. H. Logan, of Santa Cruz, is the discoverer of this wonderful fruit. It is thought to be raised from a cross of the Auginbaugh Blackberry and Red Antwerp Raspberry. The vine grows entirely unlike the blackberry or raspberry; it trails upon the ground like dewberry. The canes are very large, without the thorns of the blackberry, but have very fine spines like those found on the raspberry. Leaves resemble those of the raspberry more than of the blackberry, are of a deep green color, coarse and thick. An exceedingly strong grower and an enormous bearer. The fruit is as large as the largest sized blackberry, of the same form and shape, a dark bright red color when fully

ripe, and combines the flavor of both the raspberry and the blackberry, having a mild and very pleasant vinous flavor not found in any other fruit. Raw, it is excellent for the table, as also stewed and for jelly or jam it is without an equal. Fruit ripens early, the bulk being gone before the blackberries or raspberries become plentiful. It is firm and a fine shipper.

The Phenomenal Berry. One of the most valuable of all Luther Burbank's novelties. It is the result of a cross between the Improved California Dewberry and the Cuthbert Raspberry. Mr. Burbank describes it as larger than the largest berry ever before known, bright crimson raspberry color, productive as could be desired and the most delicious of all berries for canning and drying. The berries grow in clusters, each having five to ten or more, and individual berries often measure 3 inches around one way by 4 the other and weigh one-quarter ounce each. Even larger ones were weighed and measured last summer and when exhibited provoked the question: "Will they be sold by the dozen?"

Primus Berry. This is one of Mr. Burbank's greatest productions, and he says of it: "This was my first success with Blackberry-Raspberry hybrids, and it has been fully tested for several seasons. It is one of the most productive berries known, and is larger and more regular in shape than any other berry.

Its flavor is unique; nothing like it has before appeared. All pronounce it superior when cooked, and eaten raw it is claimed to be the best berry ever tasted. This berry is really enormous in size of fruit and vigor of growth. Its flavor is like that of a raspberry and blackberry combined; fruit long and handsome, of a mulberry-black color. Its season of fruiting is earlier than either the raspberry or blackberry, following close upon the strawberry, often before standard blackberries commence to bloom. Bushes inclined to a trailing habit, and are best trained upon wires like grape vines. It is somewhat of a perpetual bearer, showing more or less fruit all summer. In a greenhouse it is a great thing, for it will fruit splendidly all winter and prove exceedingly profitable. It is as hardy as an oak in any climate and a sure cropper every year." Too soft to bear long shipments.

DEWBERRIES (*Rubus Canadensis*)

Austin Improved. New. From Texas; has been tested several years. We note the following good points: Surpasses in productiveness anything ever seen in Blackberry or Dewberry. It is of a glossy, shining black color; its very appearance has a tempting effect on those who see it. Its flavor is most excellent. When fully ripe it will melt in your mouth most pleasantly. Has the hardy character common to the Dewberry family.

Gray's Gardena. New. Fruit very large, as large or larger than the Logan berry. One grower says: "I had some that measured 4 inches around." Color jet black, has only about one-third as many seeds as the Crandall Blackberry. Ripens early (in May in

DEWBERRIES—Continued

most parts of California). Finest quality, much more juicy and luscious than the Lucretia; a little tart until fully ripe, then quite sweet; the crop covers a period of about four weeks; firm, good shippers. The bushes are very vigorous growers, resisting frost better than any of the blackberry family. One of the best varieties ever introduced. "Any soil adapted to the blackberry will produce the Gardena Dewberry, as its root growth is very strong permeating the soil for several feet in depth. The vines give the best results when trained on wires that are 18 or 20 inches above the ground, or two wires may be used to better advantage, one, say 15 inches, and the other 20 inches above the ground."

Lucretia. One of the low-growing, trailing

blackberries; in size and quality it equals any of the tall-growing sorts. Perfectly hardy, healthy and remarkably productive, with large, showy flowers. The fruit, which ripens early, is often 1½ inches long by 1 inch in diameter; soft, sweet and luscious throughout, with no hard core; ripe before late raspberries are gone. Should be mulched to keep berries from the ground. We highly recommend this variety.

Premo. A new extra-early Dewberry; very large, yet-black, firm and good; ripens its crop very fast. The special points in this Dewberry are: Ripens 7 to 10 days earlier than Lucretia, ripening the crop so fast that it is nearly all gone at second picking of the Lucretia; better and firmer quality; foliage darker green and more healthy than Lucretia; not inclined to burn when hot sun comes.

CURRANTS (*Ribes*)

Plant in rows 4 feet apart each way, if practicable. Light and air will do as much to enhance the value of currant bushes as with other plants. Keep the ground mellow, free from weeds, and in good state of fertility and prune freely every spring. Should the currant worm appear, dust a little white hellebore powder, from a small, coarse bag, over the bushes when the leaves are damp. In some instances it may be necessary to repeat this process, but the trouble and expense of exterminating the worms is trifling if the powder is applied as soon as the worms appear.

Black Champion. Very productive; large bunch and berry; excellent quality; strong grower. The leading well tested-black sort.

Black Naples. Very large; black, rich, tender and excellent for jellies and wine. Very productive.

Cherry. Large, deep red, rather acid; bunches short; plants erect, stout, vigorous and productive.

Fay's Prolific. Originated in Chautauqua County, N. Y. A cross between Cherry and Victoria; of large size, fine flavor and claimed to be five times as prolific as the Cherry. A great acquisition.

La Versailles. Very large; red, bunch long, of great beauty, good quality. One of the finest and best. Should be in every collection. Productive.

Lee's Prolific Black. A new English variety. The fruit is large and of superior quality; the bush is a vigorous grower and enormously productive.

North Star. The strongest grower among the red varieties; should be given plenty of room and ground kept well enriched; bunches average 4 inches in length and are freely produced. Combines extreme hardiness, vigorous growth, extra quality and great productiveness.

Perfection. New This grand fruit was originated by Charles G. Hooker, of Rochester,



PERFECTION.

by crossing the Fay's Prolific with the White Grape Currant, with the view of combining the large size and color of the Fay with the good quality and productiveness of the White Grape. From quite a number of plants of this cross, the Perfection was selected as the best, and after a thorough trial by the originator, proved so satisfactory and superior in many respects, combining, as it does, the good qualities of both parents, that it was decided to enter it for the \$50 Barry Gold Medal of the Western New York Horticultural Society. The Perfection Currant was the fruit first to receive the Barry Medal. It also received the highest award given to any fruit at the Pan-American Exposition. Plants were also sent to the New York State Agricultural Experiment Station, at Geneva, N. Y., for testing there, in competition with about 60 varieties in their trial block, including all the best varieties in cultivation. The result of the trial for four years at the station has been exceedingly satisfactory, Perfection coming out at the head of all introduced varieties on

CURRENTS—Continued

its general merits. The color is a beautiful bright red; size as large or larger than the Fay, the clusters averaging longer. The size of the berry is well maintained to the end of the bunch. The Perfection has a long stem, from point of attachment to the bush to the first berry, making it easy to pick without crushing the fruit. The Perfection is a great bearer, resembling its parent, the White Grape, in this respect, superior to the Fay or any other large sort with which we are acquainted. On account of this great productiveness the plants should be kept well cultivated and fertilized, as should all heavy bearers. Under these conditions they will regularly produce heavy crops of large fruit of the very best quality. The season of ripening is about the same as that of the Cherry or Fay. Rich, mild, sub-acid, plenty of pulp with few seeds. Less acid and of better quality than any other large currant in cultivation. The White Grape has always been considered one of the best varieties for table use, and the effect of this strain is plainly seen in the very fine quality of Perfection. In habit of growth it is intermediate between its parents Fay and White Grape, with remarkably large, healthy foli-

age. For complete description, see our eight-page colored circular. Each bush will bear a Perfection label as a guarantee of genuineness.

Pomona. While not the largest, is of good size. It is a beautiful, clear bright, almost transparent red; has but few and small seeds; easily picked; hangs a long time after ripe, and is one of the best to hold up in shipping or on the market. A vigorous grower, healthy and hardy; the most productive; one of the sweetest and best in quality; continues longest in profitable bearing; retains its foliage hangs on bush in good condition the longest; comes into bearing early; is easily and cheaply picked. Holds an unparalleled record for actual acreage yield in ordinary field culture.

Victoria. A splendid variety, ripening two or three weeks later than the others, and continuing in fine condition for a long period. Bunches extremely long; berries of medium size; brilliant red.

White Grape. Very large; yellowish white, sweet, or very mild acid; excellent quality and valuable for the table. The finest of the white sorts. Very distinct from White Dutch, having a low, spreading habit and dark green foliage. Very productive.

GOOSEBERRIES (*Ribes*)

This fruit is so useful for cooking when green or ripe, and it may be canned with such facility, that it is beginning to be cultivated very extensively for both home use and market.

It requires the same cultivation and treatment for worms as the currant. The worms attack the gooseberry before the currant bushes, and if a few of the former are set near a currant plantation, and the worms exterminated on these, there will be little if any trouble from them on the currant bushes.

The American varieties, though not quite so large as the English sorts, are of fine quality, and are not subject to mildew.

Crown Bob. Very large; thin skin, hairy; bright red; flavor very good.

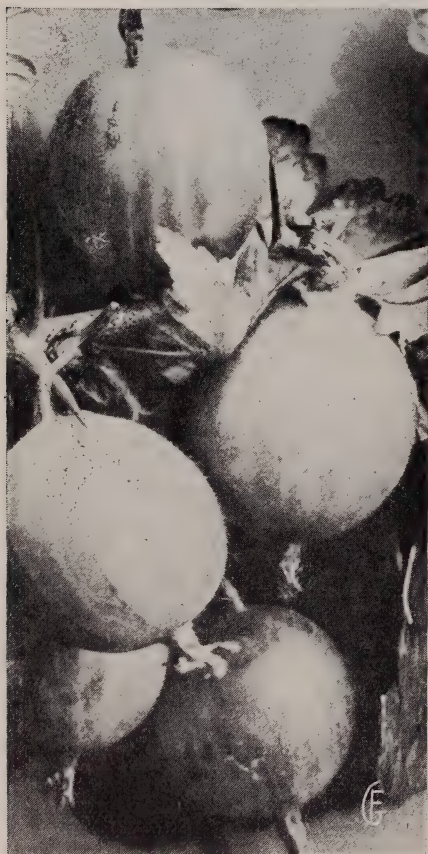
Downing. Originated at Newburgh, N. Y. Fruit much larger than Houghton; roundish, light green, with distinct veins; skin smooth; flesh soft, juicy and very fine flavored. Vigorous and productive. One of the most valuable American sorts.

Houghton's Seedling. Vigorous grower, abundant bearer; fruit of medium size; pale red, sweet and juicy. Free from mildew.

Industry. This is said to be the best English Gooseberry yet introduced. It is of vigorous, upright growth, a great cropper. The berries are of the largest size, dark red, hairy, rich and agreeable. Mildews in Willamette Valley.

Josselyn (Red Jacket). An American seedling of large size; smooth, prolific and hardy; of best quality. Has been well tested over a wide extent of territory by the side of all the leading varieties, and so far the freest from mildew, both in leaf and fruit, of them all. A wonderful cropper, with bright, clean, healthy foliage.

Originated by Prof. Wm. Saunders, of Central Experimental Farm, Ottawa, Canada, and named Red Jacket in memory of an old Indian chief, the introducer not being aware, at the time, of the existence of another Gooseberry (English) named "Red Jacket." The Committee on Nomenclature of the Western New York Horticultural Society, at Rochester, Jan. 25, 1899, to hereafter



PEARL.

GOOSEBERRIES—Continued

prevent confusion in varieties, renamed the American Red Jacket Josselyn, in honor of the introducer.

Oregon Champion. A new variety introduced from Oregon, where it originated; fruit large, round; an immense bearer, and entirely free from mildew. One of the best yet introduced.

Pearl. This very delicious American is a cross between Houghton and one of the large English varieties. It is very hardy, entirely free from mildew; superior in size and quality, more productive than Downing, and is likely to supersede this standard sort. The many flattering testimonials from most of the leading horticulturists lead us to recommend it for small or extensive planting as one of the best berries of recent introduction.

Victoria. New. The best gooseberry in England, and the champion berry for the London market. It is the strongest grower, making shoots 3 feet 9 inches in a season. Berries larger than Crown Bob or Lancashire Lad, pale red color and excellent flavor, similar to the Ashton Reds or Warrenton; a late bloomer and a sure cropper; it is of a hardy constitution, growing and bearing well in Northumberland, England. A Victoria 3-year-old bush, bearing 28½ pounds of fine, large fruit, was shown at the Drill Hall, London, in 1900, and received great praise from a large number of leading nurserymen, who spoke very highly of it. It is much in advance of all other English Gooseberries. The "Horticultural Trade Journal," August 14, 1901, said: "The Windham (Industry) seems likely to be eclipsed in productiveness by

the introduction of Victoria, by Messrs. Charlton & Sons (the introducers in England); an illustration on one of our pages shows the prolific nature of this variety, and what is shown in the illustration on the two shoots that are reproduced from photographs, we saw on hundreds of branches on the young trees. Every shoot was alike, no blanks, each one bearing down with an enormous weight of large fruit, truly a most prolific cropper; the large fruit, of a pale red color, was thickly set on every branch, characteristic of the variety from the first. Flavor, too, is excellent, and, all around, it seems well suited for market purposes."



MAGOON.

STRAWBERRIES (*Fragaria*)

Strawberries may be successfully grown on any soil adapted for garden purposes, or where good crops of grain or potatoes can be raised. The ground should be well prepared, thoroughly enriched, and be kept mellow and free from weeds.



HOOD RIVER

Admiral Dewey. New. Originated near Salem, Oregon. Larger than the Wilson; very firm; good shipper and unexcelled for canning. Color beautiful dark red, and, unlike other berries, the flesh is red to the center; no white core; shape conical, much like Clark's Seedling; very early and abundant bearer, and continues bearing through the season, coming nearest to an ever-bearing berry of any in this vicinity; flavor resembles that of the wild strawberry.

Clark's Seedling (Hood River). This new berry originated at Hood River, Oregon, where it is planted, to the exclusion of all others, for long-distance shipments. Larger than Wilson; very firm; beautiful dark red, and in quality unsurpassed.

Hood River. See Clark's Seedling.

Magoon. Has proved to be a leader in hardiness, in addition to all of its other good qualities; the Magoon alone has come through the trying weather of hard winters without injury. The Magoon Strawberry always brings top prices in the Portland market, and is a remarkable yielder.

MULBERRIES (*Morus*)

The Mulberry is valuable as an ornamental shade tree, and the fruit is much liked in many sections. Plant in deep, rich, sandy loam. The tree requires little or no pruning, and is of easy culture.

Downing's Everbearing. The beauty of this as a lawn or street tree is quite enough to commend it, but in addition it yields an abundant supply of its large, refreshing berries for about three months. Henry Ward Beecher says: "I regard it as an indispensable addition to every fruit garden; and I speak what I think when I say I had rather have one tree of Downing's Everbearing Mulberries than a bed of strawberries."

New American. Equal to Downing's in all respects, and a much hardier tree. Vigorous grower; very productive; the best variety for fruit. Ripe from middle of June to middle of September.

Noir of Spain. A new everbearing Mulberry of large size, larger than the Lawton blackberry, which it greatly resembles. Color black; flavor tart, like a blackberry and not the insipid sweet of most of the *Morus* fam-

ily, and preferred by many to a blackberry. The tree is a sure bearer, strong grower, very hardy and has a tendency to weep and could almost be classed as a weeping tree, making the fruit easily gathered. A very desirable ornamental tree, as well as one of the hardiest and most abundant bearers. By far the most desirable of the Mulberries.

Russian (*Morus Tatarica alba*). A very hardy, rapid-growing timber tree of great value, especially at the West. Introduced by the Mennonites. Foliage abundant and said to be very desirable in the culture of silkworms. Fruit good size and produced in great abundance.

White (*M. alba*). This has both white and black-fruited trees. It is also known under the names Moretti, Italica, etc. It forms a large, spreading tree and, in addition to its fruit, its foliage makes good food for silkworms.

NUT TREES

The past few years have witnessed a remarkable development in the planting of nut-bearing trees. Probably no branch of tree cultivation pays larger profits or is as well assured of a profitable market for all products. The immense importation of foreign nuts every year gives some idea of the market to be supplied. Few farms but contain land that, if planted to nut-bearing trees, would pay better than anything else to which it could be devoted. The nuts in many cases pay better than farm crops or fruits, while most kinds are making a growth of valuable timber that will of itself pay a large per cent on the investment. Our native nut-bearing trees are admirably adapted for planting in streets, farm lanes, pastures, etc., for shade, ornament and profitable returns.

ALMONDS (*Prunus; Amygdalus*)

The Almond requires a light, warm soil.

Drake's Seedling. Originated with Mr. Drake, of Suisun, California. Of the Languedoc class. Bears abundantly and regularly where the Languedoc is a total failure.

Hard-Shell. A fine hardy variety, with large, plump kernel and very ornamental when in bloom.

I. X. L. Large, generally single kernels, hulls easily; soft shell. Tree a strong, upright grower.

Jordan. Introduced from Spain about 1893. Origin of name "Jordan" unknown. Nut very long, narrow, but very plump, with hard, smooth shell, truncated base and somewhat bent at apex, edges sharp and knife-like. Fruit thin-fleshed and covered with a heavy pubescence. Kernel nearly filling the entire cavity and covered with a most delicate papery skin, much thinner than on any other Almond, which is one of its most valuable qualities. In flavor and texture the flesh far surpasses in



CHESTNUTS.

ALMONDS Continued

delicacy any other variety. The most valuable addition to the nut list that has been made for many years.

Nonpareil. Large, full kernel, thin shell. Tree of a weeping habit and a strong grower.

Ne Plus Ultra. Similar to above, but of different habit of growth.

Peerless. Originated near Davisville, California. A sure and heavy bearer; shell harder than I. X. L., single large kernel.

CHESTNUTS (*Castanea*)

American Sweet (*Castanea Americana*). The fruit of this variety is smaller than the European kinds, but it is very sweet and well flavored; highly esteemed in the Eastern states.

Italian, or Spanish (*C. vesca*). A highly ornamental tree of free growth, esteemed alike for its beautiful foliage and valuable timber. The nut is sweet and generally large, but, the trees being raised from seed, the fruit often varies in size and quality.

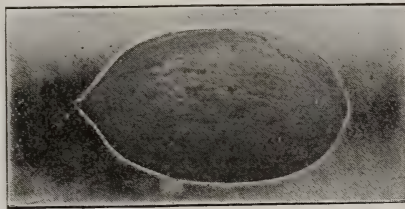
Japan Mammoth. A monstrous fruit, larger than the European and flavored like the American Sweet. Tree bears when quite young.

FILBERTS (*Corylus*)

English. This is of the easiest culture, growing six to ten feet high, entirely hardy and one of the most profitable and satisfactory nuts to grow, succeeding well on almost all soils, bearing early and abundantly. Nut nearly round, rich and of excellent flavor; admired by all for dessert. The following two are the leading varieties:

Red Hazel. Medium size; shell rather thick, kernel crimson skin, with a peculiar excellent flavor.

Kentish Cob. Not very large, oblong and somewhat compressed; shell pretty thick, of a brown color, kernel full and rich and great bearer. The best of all the nuts. See also Purple-leaf, Ornamental Department.



PECAN

HICKORY (*Carya*, or *Hickoria Pecan*)

Shellbark (*Carya alba*). To many, no other nut that grows, either foreign or native, is superior to this; in quality it possesses a peculiar rich nutty flavor, excelled by none. The tree is of a sturdy, lofty growth. The wood, on account of its great strength and elasticity, is highly prized for making agricultural implements and is unsurpassed for fuel.

Pecan. A native nut belonging to the Hickory nut family (*Carya Olivaeformis*, or *Hicoria Pecan*). The tree is of tall growth and bears abundantly; not entirely hardy here, but is further south. Should be planted wherever it will succeed. The shell is very thin, the kernel sweet and delicious.

WALNUTS (*Juglans*)

Black American (*Juglans nigra*). This species of Walnut is a common and stately forest tree in the middle and western states. Makes a fine shade and ornamental tree; produces large crops of rich and oily nuts.

Butternut, White Walnut (*J. cinerea*). A native of the Eastern states. The cultivation of this sort, so highly prized in the Eastern states, has been neglected here. It is a beautiful growing tree and yields large nuts of rough, hard shell, within which, however, are full white oily kernels, sweet, rich, of marked, though most delicate flavor. This variety does well in the coast counties and in well-watered regions of the foothills, not suited to the dry, hot valleys.

California Black Walnut (*J. Californica*). This species of Walnut is indigenous to California. The fruit is spherical, the nut hard but smooth and not furrowed like the Eastern black walnut; the kernel is rich and oily. This walnut is of a rapid growth, spreading out more than the eastern kind, but going to bearing sooner.

PERSIAN WALNUTS

(*Juglans regia*)

Also known as English, Madeira and French Walnut

We would call special attention of the public to the following most valuable varieties of walnuts. The varieties we recommend to plant for market are well-tested varieties that cannot be surpassed for beauty, size of nut, quality of meat and hardness of tree. Commercial walnut culture is concerned with *Juglans regia*, commonly known as English Walnut, but in reality the Persian, and sometimes known as the Madeira and French walnut, as it was imported into England from France. It is, however, a native of Persia or southern Asia.

FRENCH VARIETIES OF THE PERSIAN

These we grow from nuts secured in France, except Franquette, from grafted first generation trees, thus making ours the second generation tree. These should not be confused, or prices compared, with the common tender varieties grown by most nurserymen as "English walnuts," which are not hardy enough for Oregon or the northern states, and are very often barren, caused by the staminate (or male blossom or catkin) being out while the pistillate (or female blossom) is yet in a dormant state, so that, when the latter are out, there are no male catkins to fertilize the nuts, which drop off after attaining about the size of a pea. Thousands of good healthy trees can be seen both in California and Oregon of this class which are worthless, except for shade.

Chaberte. An old and most valuable variety; late in budding out. The nut is well shaped, roundish oval, and of fair size, though it is not what is called a large nut; the kernel is of extra fine quality; good bearer. The Cha-

WALNUTS—Continued

berte was originated over a century ago by a man named Chaberte, hence its name.

Franquette. Possesses distinct characteristics. The tree is very hardy, withstanding the cold winters of Eastern France, where it originated. It is a clean, vigorous grower, has never been attacked by disease, a late bloomer, escaping late frosts; a regular and abundant bearer. The hull, or outside covering, is much thicker than the soft-shell varieties, and consequently the nuts do not sunburn during hot spells, when most other varieties burn very badly. The Franquette is the ideal nut for dessert and confectionary use; it is of large, uniform size, long in form, and has a smooth, well-filled shell of medium thickness, which insures its safe shipment to market. Being long in form, it carries one to two ounces more meat per pound of nuts than the round or chunky sorts. Its pellicle is pale yellow in color; meat of exquisitely rich, oily, nutty flavor.

The Franquette is the peer of all French varieties and the heaviest bearer; unlike the Mayette, which produces a nut of fair quality, but is a decidedly shy bearer; not like the Praeparturien or other early-blooming soft-shell varieties, which only occasionally bear a crop of nuts of mixed sizes and inferior quality. The tender soft-shell varieties that have been planted in southern California must be left severely alone in the north, in order to insure an annual and successful crop. First, because the trees of the soft-shell kinds are not hardy enough to withstand our coldest winters; and, second, because they bloom too early, they are almost sure to be caught by the frost.

Mayette. This is a fine dessert nut; it is quite large, well shaped, with a light-colored shell; the kernel is full-fleshed, sweet and nutty. It is said to be very late in budding out, enabling it to escape the disastrous effect of late frosts in the spring. This is the nut imported in the United States under the name of Grenoble, but on account of the duty of 3 cents per pound, as the nut is a high-priced nut in France, a common and cheaper grade is mixed with it, to the disgust of nut importers in New York and Chicago. The Mayette was originated by a man of the name of Mayet, about 125 years ago, the nut having ever since been a great favorite. Said to be a shy bearer.

Parisienne. This beautiful nut, also one of the finest for dessert and market, was originated in the southeast of France, and not in the neighborhood of Paris, as its name would imply; its beauty caused it to be called "Parisienne," in honor of the capital of France. The nut is large, broader at the small end than the Mayette and the Franquette and has a very pretty shape; it is as late and hardy as Mayette.

Praeparturien. Perfect soft-shell of first quality. Is one of the most productive kinds.

JAPANESE VARIETIES

As the name indicates, they were introduced from Japan, and are sure to prove of great importance in nut-growing districts. Easily transplanted, hardy, abundant and early bearers, with little, if any, tap-root compared with other varieties, but abundantly supplied with laterals.

Cordiformis (*J. cordiformis*). This, as the name indicates, is a heart-shaped nut. It differs from the Sieboldi in form of the nuts, which are broad, pointed, flattened, somewhat resembling the shell-bark Hickory; meat large, of best quality and easily removed, as the shell is thin and parts easily at the sutures, enabling one to get the kernel out whole. The flavor something between that of an English Walnut and a Butternut. As a dessert nut it has few superiors; the meat, being very sweet, is used extensively for candied nuts. We recommend it as one of the very best Japanese varieties.

Sieboldi (*J. Sieboldiana*). If it produced no nuts would be well worth cultivating for an ornamental tree. Grows with great vigor,



SIEBOLDI

surpassing all other nut trees assuming a handsome form, needs no pruning; leaves large size, charming shade of green. Nuts are borne in clusters of 12 or 15 each

at tips of previous season's branches. Have a smooth shell; thicker than the English, but not so thick as the Black Walnuts, much resembling Pecans. Meat is sweet, of good quality, flavor like butternut, but less oily; commences bearing young; trees 3 to 4 years from nut in nursery rows, frequently producing nuts. Perfectly hardy, standing 21 degrees below zero without injuring a bud.

ASPARAGUS (*Asparagus*)

This earliest and finest of spring vegetables is among the easiest cultivated and most profitable. A bed once planted suffers no deterioration for thirty years or more, if it is properly attended to and well manured.

Cultivation.—See that the ground is well drained, naturally or otherwise; work it up fine and deep and make it very rich with well-rotted barn-yard manure. Locate the plants 8 inches apart, in rows 3 feet apart. Spread out the roots in a trench made deep enough to permit their crowns to be covered with 3 or 4 inches of mellow earth. Give the bed liberal dressings of manure at intervals, and, except near the seashore, three pounds of salt per square yard early every spring. Do not cut for use until the plants have grown two seasons.

ASPARAGUS—Continued

Conover's Colossal. This variety is much superior in size and quality to any of the old common varieties, being remarkably tender and of very fine flavor.

Columbian Mammoth White. It produces shoots which are white and remain so as long as fit for use. In addition to the marvelous advantage of its white color, the Columbian Mammoth White Asparagus is even more robust and vigorous in habit, and grows larger shoots and fully as many of them, as the Conover's Colossal. Market-gardeners,

growers for canners and amateurs, should give this great acquisition a thorough trial.

Palmetto. A very early variety. Even, regular size; of excellent quality.

Quality. New. Another of Burbank's wonderful creations, producing an unusual number of shoots of a light yellowish green color. Other plants often produce larger shoots, but none of them nearly so many in number or so much in weight. When cooked, it has a richer flavor, unlike and very much superior to any other.

RHUBARB, or PIE PLANT

The great value of Rhubarb has always been its earliness.

It deserves to be ranked among the best early products of the garden. It affords the earliest material for fine pies and fresh table sauce, continues long in use, and is valuable for canning. Make the ground rich and deep and thus secure a large and tender growth.



RHUBARB

Australian, Crimson Winter. Introduced by Luther Burbank: "Fully six months earlier than any other Rhubarb. The stalk of medium size, well-grown ones averaging 12 to 18 inches in length and about $\frac{3}{4}$ to 1 inch in diameter. They are a pale, greenish crimson color, turning when cooked to a light clear crimson, and of very best quality. The plants somewhat more inclined to blossom than the other kinds, which is easily remedied by topping. Crimson Winter starts to grow vigorously by October and continues to produce stalks continuously until after the common varieties make their first appearance some six months later. If kept moist will produce stalks abundantly at any season; it is, in fact, absolutely perpetual."

Dodge Prolific. A valuable new variety; seedling from the Myatt's Linnaeus; ripens between the Victoria and Linnaeus; very large; stalks often 3 to 4 feet high; very tender; the best variety that has been introduced, unless it is the Australian Crimson Winter, which stands in a class by itself.

Linnaeus. Large, early, tender and fine. The **Victoria.** Very large and valuable for market. Early.





Ornamental Department

It is strange that so few people realize that by expending a little time and study they could have well-kept and attractive grounds, adding to the beauty and comfort of the home and increasing the value of the property, in place of having a few trees, shrubs, roses and vines scattered over the ground at random, with little or no attention given to arrangement, pruning or cultivation, probably allowing them to grow in a thick turf and then saying they could not get as good results as they expected for the money expended.

INCREASES VALUE OF PROPERTY

Although still greatly neglected in many places, people in all sections, especially in cities and towns, are beginning to realize that property, whether in city or country, is of greater value when attractively planted with a judicious selection of choice ornamental trees, shrubs, vines, etc. No better investment can be made than one in trees, roses, vines, etc., used in beautifying the home, nor can better interest be made than is possible to be done in this way, besides adding to the beauty and comfort of the home.

Aside from the pleasure of having fine trees, shrubs, vines and flowers in the grounds surrounding a home, few realize how much these add to the commercial value of the place. A purchaser having to decide between a house with bare and unkept grounds and one surrounded by fine ornamentals, invariably chooses the latter at a marked advance in price, because he sees that he will at once enjoy what it would otherwise take some years to secure. Sagacious men are led to a knowledge of these facts to plant fine trees and shrubs about vacant lots they are intending to put upon the market. Lots thus planned readily secure purchasers at good prices when bare grounds go begging for buyers.

Buy none but the best. We have made a specialty of offering none but the best, both in variety offered and quality of the stock shipped. A little thought will convince all that it is not the number but the quality that counts, especially in ornamentals. Few people realize the importance of getting started right, and spend years of regretting which a little forethought in selection and planting would have prevented. Buy none but the best stock carefully selected as to form and size, with a good root system, properly grown by a reliable nurseryman. This will prove much cheaper in the end than forest-grown trees, or cheap inferior nursery stock.

HOW TO PLANT

A fine, well-cut lawn is one of the handsomest features of a place. Do not make the mistake of planting at random all over the grounds. Trees and the larger shrubs may be planted along a lane or avenue leading to the house, or dotted about the lawn on lines radiating from it. This will secure light, air and a good view from the house. In laying out the grounds, take into consideration economy in labor, and make as few walks as possible. Upright shrubs, roses and flowers should be planted in beds, each kind by itself, and avoid making the lawn look like a checker-board. These beds should be well cultivated and the plants pruned an-

nually. Mass the trees and beds on the boundaries so as to leave a broad space for the lawn, and where there is a pretty view leave an opening. Where there is an unsightly object, conceal it by planting trees or climbing vines. Do not plant large trees near the house, except enough on the sunny side for shade.

Plant shrubs and small trees twice as thick as they should be when fully grown. This will make a good showing at once, and, when the growth of the plants has made them too thick, some should be taken out. It will not do to plant so little that years must elapse before a fine effect can be produced, but, by planting a surplus at first, they can gradually be taken out.

VINES

Should be planted near to and allowed to climb upon and about the house, or trained on posts, trellises, arbors or stakes placed in suitable locations on the lawn.

Groups of trees and shrubs possessing bright-colored bark or foliage, and groups of flowering trees and shrubs, are highly effective when in blossom and should be more generally planted.

Weeping trees are especially desirable on small lawns.

NEW VARIETIES

We are constantly adding to our list of ornamentals, as well as in other departments. Before placing new varieties on the market we give them a thorough trial in the nursery, and thus weed out undesirable varieties, offering only the best in each class.

VARIETIES NOT LISTED

in every large, well-conducted nursery there are many varieties of extra size, but in too small quantities to list in the catalogue; also new varieties which have not been thoroughly tested. If you wish any variety in a special size or variety not listed, write to us for special quotations, and if we have it in stock we shall be pleased to supply.

MOMENCLATURE AND DESCRIPTION

Our Catalogue being made especially for the planter, we have given, as far as possible, the common name first, and the botanical name follows in parenthesis; although the common name is never absolutely reliable, as different localities sometimes have different names for the same plant.

There is much confusion even in the botanical names of trees, shrubs and plants at the present time. We have endeavored to follow the later botanists, and to make these as accurate as possible, and hope to correct any errors that may occur in future editions, and will appreciate it if customers will call attention to any misprints.

UPRIGHT DECIDUOUS TREES

Acacia. See Locust.

AILANTHUS (Tree of Heaven)

- **Glandulosa.** A distinct ornamental tree from Japan; rapid grower, with long, elegant, feathery foliage; exempt from diseases and insects. One of the most dis-



PURPLE-LEAVED BEECH.

tinct of ornamental trees with pinnate foliage. Useful to produce tropical effects. Is sometimes cut off every spring, when the young shoots form a foliage mass of tropical richness.

ALDER. *Alnus*

European (*A. glutinosa*.) A tree of rapid growth, attaining a height of 40 to 60 feet; foliage wavy, roundish, wedge-shaped; suitable for damp soils, but thriving well everywhere.

ARALIA**Angelica Tree, or Hercules' Club**

All small trees with large, finely divided foliage and showy heads of white flowers; very useful for lawn planting and subtropical effects. We recommend the two following varieties.

Japonica (Angelica Tree.) A handsome, distinct, small tree from Japan; spreading habit of growth, with immense finely divided foliage and spiny stems. Flowers white, in large spikes, in July.

Spinosa (Hercules' Club.) A very showy sort. Broad, handsomely cut foliage, and immense clusters of small white flowers in July or August. A singular-looking, small-sized tree, with very prickly stems and pinnate leaves. It suckers occasionally from the roots, but not after well established.



CATALPA BUNGEI

ASH. *Fraxinus*

European (*F. excelsior*.) A lofty tree of rapid growth, with spreading head, pinnate leaves and black buds.

See also Weeping Trees.

Balm of Gilead. See Poplar.

BIRCH. *Betula*

European White (*B. alba*.) A fine tree of moderate size, with silvery bark and slender branches.

See also Weeping Trees.

BEECH. *Fagus*

European (*F. sylvatica*.) A beautiful tree growing to the height of 60 or 80 feet.

Purple-leaved (*F. purpurea*.) Discovered in a German forest. An elegant, vigorous tree, growing 45 to 50 feet high. Foliage deep purple, changing to crimson. Like all varieties of the Beech, this is difficult to transplant, hence small trees 3 feet high are preferable.

Riversi (*F. purpurea Riversi*.) Smooth-leaved Purple Beech. This variety differs from the ordinary Purple-leaved by its compact, symmetrical growth and crimson foliage early in the spring, changing to dark purple in the summer. One of the finest of all purple-leaved trees.

See also Weeping Trees.

Box Elder. See Ash-leaved Maple.

Buckeye. See Horse Chestnut.

Buttonwood. See Sycamore.

CATALPA. *Catalpa*

Bungei (Umbrella Catalpa). Grafted on stems 6 to 8 feet high, it makes an umbrella-shaped top without pruning. Perfectly hardy and flourishes in almost all soils and climates. Leaves large, glossy, heart-shaped, deep green, lie like shingles on a roof; always make a symmetrical head. One of the most unique trees. A valuable acquisition, desirable for lawn, park and cemetery planting.

Speciosa. One of the most rapid growers. Valuable for timber, fence-posts, railroad ties, etc., possessing wonderful durability. Large, heart-shaped, downy leaves and compound panicles of white flowers, tinged with violet and dotted with purple and yellow. Very ornamental and useful.

Syringaefolia. A native of the south. A rapid-growing, beautiful tree, with very large, heart-shaped leaves and pyramidal clusters of white and purple flowers. Late in July.

Teas' Japan Hybrid. Large, luxuriant foliage, handsome white flowers with purple dots and a touch of yellow around the throat, with a pleasant, delicate fragrance. A tree in bloom not only produces a magnificent spectacle to the eye, but also fills the air quite a distance with its agreeable odor. In rapidity of growth it rivals the most luxuriant trees of temperate climates.

CRAB. *Pyrus*, or *Pyrus Malus*

Bechtel's Double-flowering (*P. floribunda*). Makes a medium-sized ornamental tree of great beauty; perfectly hardy; succeeds well in all soils not extremely wet. When in bloom in early spring this tree presents the appearance of being covered with perfectly double, small pink roses of delicious fragrance. The only sweet-scented double Crab; blooms quite young. Unlike many other trees, it does not bloom until the leaves are fully developed, which adds great-

One of the most desirable of ornamental trees.

See also Weeping Trees and Shrubs.

ELM. *Ulmus*

American White (*U. Americana*). The noble, spreading, drooping tree of our own woods. One of the grandest and hardiest of park or street trees.

Corkbark (*U. racemosa*). The bark is corky, the tree an upright, fast grower.

English (*U. campestris*). An erect, lofty tree, with rather small leaves.

Purple-leaved (*U. purpurea*). Erect in growth, with slender branches, densely clothed with dark purplish green foliage.

Camperdown. See Weeping Trees.

FRINGE. *Chionanthus*

Purple (*Rhus Cotinus*.) A much-admired small tree or shrub for its curious fringe or hair-like flowers that cover the whole surface of the plants in midsummer.

White (*Chionanthus Virginica*). A small native tree or shrub, with dark glossy leaves and drooping, racemes of pure white flowers, having narrow fringe-like petals. Its foliage, as well as its flowers, make it one of the most desirable lawn trees.

Ginkgo. See *Salisburia*.

Golden Chain. See *Laburnum*.

Hercules' Club. See *Aralia*.

Hickory. See *Nut Trees*.

HONEY LOCUST. *Gleditschia*

Three-thorned (*G. Triacanthos*). A rapid-growing native tree, with powerful spines and delicate foliage, used especially for hedges.

HORSE-CHESTNUT.

Aesculus

Red-flowering (*Ae. rubicunda*).

Not so rapid or so fine a grower as the white; foliage of a deep green and blooms later, with showy red flowers.

White-flowering (*Ae. Hippocastanum*). A very beautiful, well-known tree, with round, dense head, dark green foliage, and in early spring an abundance of showy white flowers, slightly marked with red specks or panicles.

Ohio Buckeye (*Ae. flavo*). Has pale green leaves and showy yellow flowers. A fine small tree. A very crooked and irregular grower.



CATALPA SPECIOSA (See Page 54).

ly to its beauty. Sure to become quite popular as soon as it is well known.

DOGWOOD. *Cornus*

American White (*C. florida*.) A native tree of fine form and beautiful foliage, growing from 20 to 25 feet high, producing white flowers 3 inches in diameter, early in the spring before the leaves appear. A very desirable tree. Foliage grayish green, turning deep red in autumn, making the tree one of the most beautiful of that season.

JUDAS, or RED BUD. *Cercis*

American (*C. Candensis*.) A medium-sized, native ornamental tree, covered with delicate pink flowers before the leaves appear. Heart-shaped, pure green leaves, with glossy surface; flowering about same time as Chinese Magnolias, and planted with them, produce fine effect.

KENTUCKY COFFEE TREE

(*Gymnocladus Canadensis*)

A native tree of large size, with rough bark and coarse branches; feathery foliage of a bluish green color. Flowers white, in racemes, followed by long pods.

LABURNUM. *Cytisus*

Golden Chain (*C. vulgare*.) Bears long, pendent racemes of yellow flowers in June; showy and beautiful. Should be in every lawn.

LINDEN. *Tilia*

Close, dense-headed rapid-growing tree, excellent for shade, doing well in nearly all situations; well adapted to street, park and large lawns; should be planted much more freely than they are.

American, or Basswood (*T. Americana*.) A rapid-growing, beautiful native tree, with very large leaves and fragrant flowers.

European (*T. Europaea*.) A very fine pyramidal tree, with large leaves and fragrant flowers. A valuable tree for street and lawn



ELM, AMERICAN WHITE (See Page 55)

planting, developing into beautiful specimens.

LOCUST or ACACIA. *Robinia*

Black (*R. Pseudacacia*). Fifty to 80 ft. Medium sized tree, with feathery foliage and drooping racemes of very fragrant pea-shaped flowers. Cut back when transplanting. This is the tree producing the "posts" and "pins" of commerce.

Rose, or Moss (*R. hispida*). A native species of spreading, irregular growth; very long, elegant clusters of pea-shaped, rose-colored flowers in June, and at intervals through the season. Compound foliage of a pleasing shade of light green.

Locust, Honey (*Gleditsia*). See page 55.

Maidenhair. See *Salisburia*.

MAPLE. *Acer*

Ash-leaved (Box Elder, or Manitoba Maple; *A. Negundo*.) A fine, rapid-growing variety,



PURPLE-FRIDGE TREE (See Page 55).

with handsome, light green pinnated foliage and spreading head; very hardy; desirable for street planting, and succeeds in many sections where other varieties do not thrive.

Norway (*A. platanoides*.) A native of Europe. Its large, compact habit, broad, deep green shining foliage, and its stout, vigorous growth, renders it one of the most desirable species for streets, parks and lawns; rather a rough, crooked grower when young, but soon develops into straight, magnificent specimens.

Purple-leaved Sycamore (*A. Pseudo-platanus purpureum*.) Leaves deep green on upper surface, purplish red beneath, producing a beautiful color effect when leaves are in motion. Tree of robust habit; fine for lawns for grouping with other foliage trees.

Schwedler's (*A. Schwedleri*.) A beautiful variety, with young shoots and leaves of a bright purplish and crimson color, which changes to purplish green in the older leaves. A distinct and handsome sort.

Silver-leaved, or Soft (*A. dasycarpum*.) A well-known native tree of rapid growth, large size and irregular rounded form; foliage bright green above and silvery white beneath; tree very hardy and easily transplanted. One of the most useful trees.

Sugar, or Rock (*A. saccharinum*.) A popular American tree of excellent pyramidal form. Its upright habit of growth, dense shade and adaptabil-



NORWAY MAPLE

ity to different soils have rendered it one of the most extensively used. Valuable for sugar or timber, as well as ornamental and shade.

Sycamore (*A. Pseudo-platanus*.) A noble variety, with spacious head and large, deep green foliage; a rapid, upright, free grower; desirable for shade.

MOUNTAIN ASH.

Pyrus Sorbus

Very ornamental, especially when covered with their bright scarlet berries.

European (*P. Aucuparia*.) Similar in appearance to the American, with finer foliage and smaller, deeper colored berries, much more desirable than the American and everywhere very popular. Erect stem, smooth bark, head dense and regular. When fully grown 20 to 35 ft.

Oak-leaved (*P. quercifolia*.) A very distinct and desirable tree, with compact, pyramidal head and dark lobed leaves, downy underneath, producing the same flowers and berries

as the preceding. Very hardy and desirable for planting on lawns or in dooryards. When fully grown, 20 to 25 ft.

See also Weeping Trees.

Mulberry. See page 60, also Weeping Trees.



FIG. 99.

SUGAR MAPLE.

OAK *Quercus*

Pin (*Q. palustris*). The Pin Oak is undoubtedly the most valuable variety for all practical purposes. The foliage is dense, finely divided, of a beautiful shining green that colors to sparkling red and yellow in fall. The tree is easily transplanted and grows well on wet or dry ground, is, in fact, the quickest-growing of all the Oaks. As an avenue and street tree it is unequaled, and it is one of the best for park planting.

Red (*Q. rubra*). A very well known rapid-growing native species. The leaves are large and bright green and take on a purplish scarlet hue in the fall. It becomes of large size, with a round and spreading head. One of the best sorts for street, avenue and ornamental purposes.

Pecan. See page 49.

Plane Tree. See Sycamore.

Platanus. See Sycamore.

POPLAR. *Populus*

Balm of Gilead (*P. candicans* *Ontariensis*.) A native species of remarkably rapid, luxuriant growth, with large glossy foliage.



CAROLINA POPLAR.

Bolles' (*P. Bolleana*.) New, of pyramidal form; leaves dark green on upper side, brilliant silver beneath; very beautiful. A valuable tree for grouping on the lawn.

Carolina (*P. monolifera* *Carolinensis*.) One of, if not the most rapid-growing trees, with large, handsome, glossy, serrated, deep green leaves. Succeeds everywhere; especially adapted to large cities, where it makes unusually fast growth, and resists smoke and gas. Pyramidal form, making a spreading head and dense shade when properly trimmed. New growth should be well cut back in spring for the first few seasons. It is unexcelled for quick growth and effect; makes a splendid wind-break or screen; is used in larger numbers than any other one tree for street planting. For new places and streets where the slower-growing ornamentals are desired, plant the Poplars between, securing an almost immediate effect, removing them as the other trees attain size.

Golden (*P. aurea* *Van Geertii*). Has fine golden yellow foliage, retaining its brilliancy throughout the season; fine for contrast with green or purple-leaved trees. One of the most effective for street and lawn planting.

Lombardy (*P. fastigiata*.) A well-known, tall, erect-growing tree of rapid growth and spire-like outline; very essential in landscape gardening to give variety of form



CUT-LEAVED BIRCH (See Page 60).

POPLAR—Continued.

and destroy the appearance of sameness produced by other trees.

Silver-leaved (*P. alba*). A tree of wonderfully rapid growth and spreading habit; leaves large dark, rich green above and white as snow beneath.

See also Weeping Trees.

PRUNUS. Plum

Pissardi (Purple-leaf Plum). A new shrub of Persian origin. The tree is a decided contrast in itself. The leaves, as they first appear on the tips, are a beautiful orange color, and they mature to a rich purple, clear and distinct, growing darker as the season advances. The leaves remain until late in the fall—a decided contrast to other shrubs. Its beautiful, shining bark and its pink flowers and bright red fruit altogether make it the most rich and beautiful ornamental tree possible. It is remarkably hardy; very rapid grower, compact, symmetrical in proportion, and attains about the size of the peach.

Triloba (Double-flowering Plum). A very desirable shrub, introduced from Japan. Flowers semi-double, of delicate pink, upward of an inch in diameter, thickly set. Hardy; flowers in May.

RED BUD. See Judas tree.

SALISBURIA. Maidenhair, or Ginkgo

Adiantifolia. A Japanese tree of large size and columnar growth. When full-grown it is more spreading. The leaves resemble those of the Maidenhair Fern. A valuable, ornamental tree, and useful for street and avenue planting. If pruned several times when young it will make a round, compact-headed tree. It seems to thrive well along sidewalks in the city, and to be generally free from insects and diseases.

SYCAMORE. Platanus

American Plane, Sycamore, or Buttonwood (*P. occidentalis*). A well-known, tall, rapid-growing native tree; leaves large, heart-shaped at the base; the lobes sharp-pointed.

European (*P. orientalis*). Oriental Plane. A lofty, wide-spreading tree; heart-shaped leaves, more deeply cut than above species; valuable for its handsome foliage and free growth; not so subject to disease as our

native species. Entirely free from worms or insects. One of the oldest cultivated trees known.

THORN. Crataegus

Double Scarlet (*C. coccinea* fl. pl.). Flowers deep crimson, with scarlet shade; very double, and considered larger than the double red; fine rich foliage.

Double White (*C. alba* fl. pl.). Has small, double, white flowers.

Paul's Double Scarlet (*C. coccinea* fl. pl. Paulii). Flowers large, deep carmine-scarlet. Superior to any other variety.

TREE OF HEAVEN. See *Ailanthus*.

TULIP TREE, or WHITEWOOD
Liriodendron

Liriodendron Tulipifera. A magnificent native tree, of very rapid growth; broad, glossy and fiddle-shaped leaves. It is valuable for its clean, smooth bark and handsome green foliage. The flowers appear the first week in



CAMPERDOWN WEEPING ELM (See Page 60).

June. They are large, greenish-yellow, blotched orange, and have the shape of a tulip. It makes a very desirable tree for street planting, thriving in low as well as high ground. Plant only in spring and prune very closely. Allied to the Magnolias, and, like them, difficult to transplant, unless of small size.

Walnut. See page 49.

Whitewood. See Tulip tree.

WILLOW. Salix

Rosemary-leaved (*S. rosmarinifolia*). Budded 5 to 7 feet from the ground, it makes a very handsome round-headed small tree; branches feathery, foliage silvery.

See also Weeping Trees.

WEeping, DROOPING OR PENDULOUS TREES

Much attention is now given to this class of trees, and we place them separately for the convenience of our patrons. The superior grace and beauty of the weeping varieties render them especially adapted to yard, lawn or cemetery. No collection is complete without them; among ornamentals they have no superior.

For the benefit of those unacquainted with their habits, or manner of growth, we would divide them into two classes:

(A)—Those which are grafted where the top or head commences to form, which assume that conspicuous, umbrella-like form so well known, as in the Camperdown Elm, and are especially adapted to planting in small lawns or cemeteries, as well as producing beautiful effects in parks among the larger trees.

(B)—Those having long, slender branches, which droop naturally, like the Cut-leaved Birch and Babylonica Willow, having tall-growing trunks, with long slender branches. They are best adapted to parks, streets or the larger lawns. Where they can be given sufficient room, the elegance, grace and beauty of their branches, at rest or in motion, are so apparent that they have few, if any, superiors among ornamental trees.

BEECH. *Fagus*

***Sylvatica pendula*.** A remarkably vigorous, picturesque tree of large size. Its mode of growth is extremely curious. The trunk or stem is generally straight, with the branches tortuous and spreading; quite ungainly in appearance divested of their leaves, but when covered with rich luxuriant foliage, of wonderful grace and beauty.

BIRCH. *Betula*

Cut-leaved (*B. laciniata pendula*).

Probably the most popular and desirable lawn tree in existence, and produces a beautiful effect on streets and avenues. Makes a vigorous growth and is perfectly hardy. Trunk straight, slender, white as snow. The slim side branches droop in a most picturesque manner; foliage delicate and deeply cut, coloring finely in the fall. The drooping branches and silvery bark form a most effective combination during the winter months. Mr. Scott, in his "Suburban Home Grounds," says of it: "No engraving can do it justice; like the palm tree of the tropics, it must be seen in motion, swaying in the lightest breeze, its leaves trembling in the heated summer air, its white bark glistening through the bright foliage and sparkling in the sun, to enable us to form a true impression of its character."

MOUNTAIN ASH. *Sorbus*

Weeping (*S. Aucuparia pendula*). A beautiful tree, with straggling, weeping branches; makes a fine tree for the lawn; suitable for covering arbors.

ELM. *Ulmus*

Camperdown Weeping (*U. pendula*). A vig-



WEeping MULBERRY.

orous grower, and forms one of the most picturesque drooping trees. Leaves large, dark green and glossy, and cover the tree with a luxuriant mass of verdure; very desirable.

MULBERRY. *Morus*

Teas' Weeping Russian (*M. Tatarica pendula*).

A weeping variety of the now well-known Russian Mulberry. One of the most graceful and hardy weeping trees in existence. Wholly unlike anything heretofore introduced. Forms a perfect umbrella-shaped head, with long, slender, willowy branches drooping to the ground. All who have seen it agree that in light, airy gracefulness, delicacy of form and motion it is without a rival.

MULBERRY—Continued

It has beautiful foliage; is wonderfully vigorous and healthy; is one of the hardiest, enduring the cold of the North and the heat of the South; safe and easy to transplant. Admirably adapted for ornamenting small or large grounds, or for cemetery planting. A very happy use of it lately seen was in the form of a canopy or tent, making a most pleasant play-house for children, who set their table and enjoyed themselves in the cool shade of its foliage.

WILLOW. *Salix*

American Weeping (*S. purpurea pendula*). An American dwarf slender-branched species; grafted 5 or 6 feet high, it makes one of the

most ornamental of small weeping trees; more hardy than the *Babylonica*.

Babylonica, or Common Weeping (*S. Babylonica*). The well-known common Weeping Willow. A large tree covered with drooping branches.

Kilmarnock (*S. Caprea pendula*). A distinct variety, having reddish shoots and large, glossy foliage; grafted at a proper height, about 5 feet from the ground, it makes a very desirable small lawn tree, having a perfect umbrella-shaped head, with the branches drooping gracefully to the ground. It is well suited for planting in cemetery lots or other small enclosures. Extensively planted, and should be in every collection of ornamental shrubbery. Hardy and of vigorous growth.

UPRIGHT DECIDUOUS SHRUBS



THUNBERGII. (See page 62)

No yard is complete without one or more beautiful flowering shrubs, and we would urge a more extensive planting of this class of ornamentals covering such a wide range in flower and foliage, habit of growth and season of blossoming. Requiring but small space, they can be used on lawns to fill vacancies, where large trees could not be harmoniously grown, breaking the monotony of the landscape by grouping or distributing singly according to size of grounds and scenic effect.

ALTHAEA. *Hibiscus Syriacus*

Rose of Sharon. One of the most showy and beautiful shrubs. Flowers large, double, of many brilliant colors. Blooms freely in August and September when few other trees or shrubs are in blossom.

Double Red (*H. rubra flore pleno*).

Double Purple (*H. purpurea flore pleno*).

Double White (*H. alba flore pleno*).

Variegated Leaf (*H. variegata flore pleno*).

ALMOND. *Prunus*

Double Rose-flowering (*P. Japonica rubra fl. pl.*). A beautiful small shrub, bearing in May before the leaves appear, small, double, rose-like flowers, closely set upon the twigs.

Double White-flowering (*P. Japonica alba fl. pl.*). Produces beautiful white flowers in May.

BARBERRY. Berberis

Used as hedge-plants quite extensively. Their showy orange and yellow flowers in May and June are followed by bright and various-colored fruits, making them especially showy in autumn and winter.

Purple-leaved (B. purpurea).

Foliage and fruit of a violet-purple color, very striking; fine for single specimens; also a desirable ornamental hedge plant, planted by itself or intermingled with the common.

Thunbergii. A very pretty variety from Japan; of dwarf, graceful habit; foliage small, changing to beautiful bright red early in fall; very showy.

CALYCANTHUS

Sweet- Scented Shrub, or Carolina Allspice

Floridus (Sweet-scented Shrub). The wood is fragrant; foliage rich; flowers



CALYCANTHUS.

are of chocolate color, having a peculiar agreeable odor. Flowers in June and at intervals afterward.

CORNUS. See Dogwood, pages 55 and 63.

CURRENT. Ribes

Crimson-flowering (R. sanguineum). Produces an abundance of crimson flowers in early spring.

Yellow-flowering (R. aureum). A native species with yellow flowers.

CYDONIA. See Quince, Japan.

DEUTZIA. Deutzia

This valuable species comes to us from Japan. Their hardiness, luxuriant foliage and profusion of attractive flowers, render them deservedly among the most popular of flowering shrubs. The flowers are produced in June, in racemes 4 to 6 inches long.

Abel Carriere (D. Hortensis Abel Carriere). Bright rose-carmine; a choice sort. One of the best.

Double-flowering (D. crenata flore pleno). Flowers double, white, tinged with rose. One of the most desirable flowering shrubs in cultivation.

Slender-branched (D. gracilis). A very desirable dwarf-growing variety. Flowers pure white. A valuable plant for winter blooming.



DEUTZIA.

DEUTZIA—Continued

Lemoine's (*D. Lemoinei*). Single white. A hardy hybrid, partaking to a great extent of the character of *Gracilis*, but of a stronger growth. Good for forcing.

Pride of Rochester. A new variety said to excel all others in size of the double white flower, length of panicle, profusion of bloom and vigorous habit. A charming acquisition, produced from the *Crenata*.

Watereri. A grand new variety with very large double white flowers, borne in large, loose racemes. Robust grower and very hardy.

DOGWOOD. Cornus

Red-branched (*C. sanguinea*). A native species, very conspicuous and ornamental in the winter, when the bark is a blood-red.

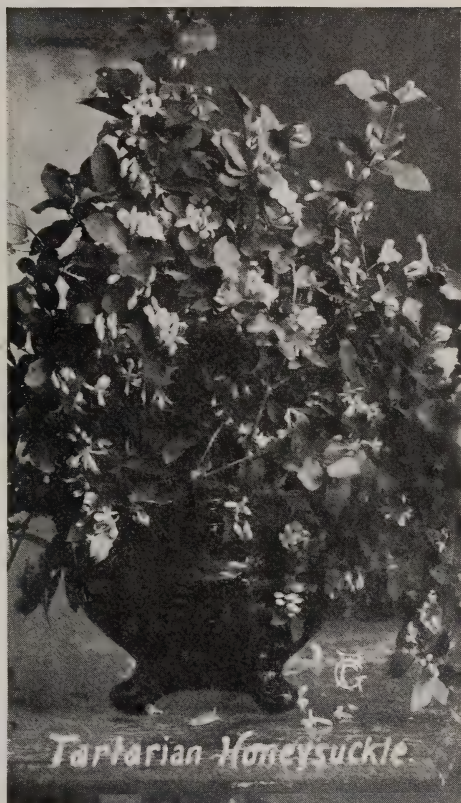
Sanguinea, var. elegantissima variegata. One of the finest variegated shrubs; of rapid growth. The leaves are broadly margined with white; bark bright red in winter. See also page 55.

ELDER. Sambucus

Golden (*S. aurea*). From Holland. New and rare. When the leaves first appear they are bright green, but, if planted where they will have plenty of sun, they soon change to a golden green. The blossom, which resembles the common Elder blossom, appears in July. The best effect is produced when they are planted with other shrubs, thus rendering the foliage more conspicuous by the contrast.

FILBERT. Corylus

Purple-leaved (*C. Avellana*, var. *atropurpurea*, or *purpurea*). A very conspicuous shrub, with large, dark purple leaves. Soon after the leaves expand they are almost black, but



later on fade to a light purple. Valuable for planting in groups of large shrubs to secure color effect. Distinct and fine. See also page 49.

FORSYTHIA. Golden Bell

Suspensa (Weeping Forsythia). Of drooping habit, with pendulous flowers.

**HONEYSUCKLE, UPRIGHT.
Lonicera**

Red Tartarian (*L. Tatarica rubra*). A beautiful flowering shrub, blooms early in spring; flowers bright pink.

White Tartarian (*L. Tatarica alba*). Similar to the preceding, with white flowers. See Climbing Honeysuckles, page 69.

HYDRANGEAS

Beautiful free-flowering shrubs, bearing immense panicles or trusses of flowers. *Paniculata* is perfectly hardy and requires no protection; the other varieties require protection in winter, and should be grown in pots or boxes and wintered in the cellar, except in the warmer sections.



HYDRANGEA.

HYDRANGEAS—Continued

Paniculata grandiflora. This is one of the most valuable hardy shrubs. It attains a height of 3 to 4 feet, and is perfectly hardy in all parts of the country. The flowers are white, borne in immense panicles nearly a foot in length. It commences flowering in July and continues until November. The plant should be cut back every spring at least one-half of last season's growth, as the flowers are borne on new wood and are much finer when the plant is treated in this way. An excellent shrub for cemetery planting.

LILAC. *Syringa*

Well-known shrubs that succeed everywhere. Few are aware of the wonderful improvement in the past few years. We offer a choice selection of the best new double varieties, remarkable for their large trusses and beautiful flowers. Should be in every collection.

Common Purple (*S. vulgaris*). The well-known sort.

Belle de Nancy (Double). Very large; brilliant satiny rose, white toward center. Very fine.

Common White (*S. vulgaris alba*).

Frau Dammann. This produces the largest clusters of white Lilacs, of the common species known in cultivation, and also the purest white.

Japonica (Tree Lilac). A new species from Japan that makes a tree 20 to 25 feet high. Foliage large, very dark green, glossy and leathery; flowers white, in immense clusters, that stand up erect above



FORSYTHIA-SUSPensa (See Page 63)



SMOKE TREE (See Page 67).

the foliage on stout stems. It flowers about a month later than the common sorts.

Josikaea, or Chionathus-leaved (*S. Josikaea*). From Transylvania. A fine distinct species of tree-like growth, with dark, shining leaves and purple flowers in June, after the other Lilacs have done.

Madame Ludwig Spaeth. Panicle long; individual flowers large, single dark purplish red; distinct; superb. The finest of its color.

Madam Abel Chateney (Double). Large panicle; double white. Very fine.

President Grevy. A beautiful blue; individual, flowers very double and very large, measuring three-quarters of an inch in diameter; the panicle is magnificent and measures 11 inches in length and 5 inches across. One of the finest Lilacs.

Senateur Volland (Double). Flowers rosy red.

Persian (*S. Persica*). Medium size, with small leaves and bright purple flowers.

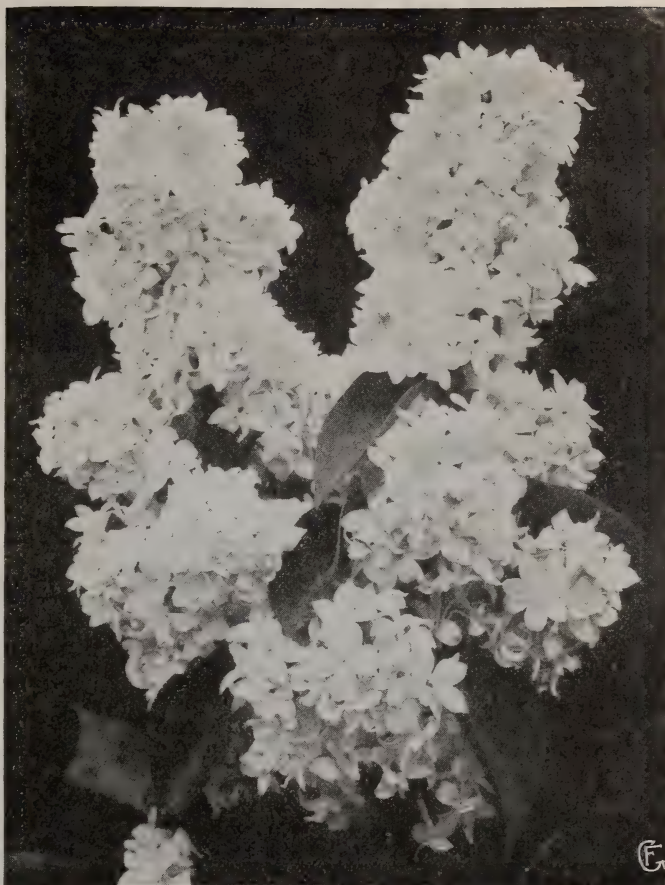
White Persian (*S. Persica alba*). A fine sort with flowers delicately tinged with rose-color.

LILAC—Continued**MEADOW SWEET.** See *Soiraea*.**MOCK ORANGE.** See *Syringa Philadelphus*.**OLEASTER.****PLUM** (*Prunus*). See under Deciduous Trees.**PRIVET. Ligustrum**

The Privet in all its varieties deserves attention as an ornamental plant. It is almost an evergreen, and grows freely in all soils; is compact and regular in its form, and bears shearing to any extent. The flowers appear in June and July. Makes fine ornamental single specimens and one of the most desirable hedge-plants; compact, free grower.

Common (*L. vulgare*). An English shrub with smooth, dark green leaves; showy white flowers; fruit purple. Hardy.

California (*L. ovalifolium*). A vigorous-growing variety, of fine habit, thick, glossy, nearly evergreen leaves. Of all ornamental hedge-plants this is the most highly prized. If cut to the ground one or two years after planting, it makes a very thick hedge right from the bottom, sending up many strong shoots. The leaves are a rich green, and will remain on the plants up to Christmas, and if they are a little sheltered they will keep green almost all winter. This is especially the case if the hedge has attained some age and has frequently been trimmed. Though it is a strong grower, it can be kept to a low size by frequent trimming.



LILAC.

QUINCE, JAPAN*Cydonia*, or *Pyrus Japonica*

There are several flowering varieties, differing only in their color. Although of straggling growth, they can be pruned to desirable shapes without injury. Their large, brilliant blossoms appear early in the spring in great profusion; foliage bright green and glossy all through the summer. It is sufficiently thorny and strong to make a valuable hedge, and its beautiful flowers make it very handsome for that purpose.

SNOWBALL.**Common** (*V. sterile*).
Viburnum

A well-known favorite shrub of large size, with



FLOWERS OF SYRINGA.

SNOWBALL—Continued

globular clusters of pure white flowers in the latter part of May.

Opulus (High Bush Cranberry). Handsome and dense foliage; flowers white, in drooping flat cymes, followed by brilliant scarlet fruit in showy pendulous bunches, that remain on the plant all winter.

Plicatum (Japan Snowball). This Japanese variety of the old-fashioned Snowball is one of the most valuable of our hardy shrubs. It forms an erect, compact shrub, 6 to 8 feet high; blooms in June and for a long time is a solid mass of white, the plants

off as fast as they commence to decay, there will be a continuance of them throughout the season, to some extent.

Aurea (Gold-leaved Spirea). Flowers fine, white; foliage of a beautiful golden color, which gives variety to the lawn and renders it very desirable.

Callosa alba. A white-flowering variety, of dwarf habit; very fine. Remains in flower all summer.

Prunifolia flore pleno (Double-flowering Plum-leaved Spirea). Very beautiful; its flowers are like white daisies. From Japan. Blossoms in May.

Thunbergii. Profusion of small white flowers



WEIGELIA-DIERVILLA

being completely covered from the ground to the top of the branches with large balls of flowers white as snow. The foliage in early summer is an olive-green, turning to very dark green later in the season.

SPIRAEA. Meadow Sweet

Anthony Waterer. A most beautiful variety of Mumalda. In habit of growth it is the same as its parent. The flowers are crimson in the bud and when first open, fading afterwards to a deep pink. It blooms about the close of June, and, if the flowers are cut

in early spring. Forms a rounded, graceful, dwarf bush; branches slender and somewhat drooping.

Van Houttei. The habit of the plant is pendulous, yet upright, giving a most graceful appearance even when out of bloom. The flowers are pure white and borne in dense clusters along the whole length of the branches, often weighing them to the ground. One of the most ornamental shrubs that we offer. Excellent as a single lawn plant, or for grouping with other shrubs; also a fine hedge-plant.

SUMAC, or SMOKE TREE. *Rhus*

Shining (*R. copallina*). Noted for its lustrous green leaves, which are crimson in autumn, and its scarlet heads of seeds.

Mist Shrub (Smoke Tree; *R. cotinus*). The large panicles of purplish misty-looking flowers, borne in early June has gained for it the name of Mist Shrub, Smoke Bush, etc. In fall the leaves change to brown, red and yellow shades.

SYRINGA, or MOCK ORANGE

Philadelphus

All the species and varieties of the *Syringa Philadelphus* have white flowers, many of them quite fragrant.

Garland (*P. coronarius*). A well-known shrub, with pure white, sweet-scented flowers.

Golden-leaved (*P. aurea*). A very pretty plant of medium size, with golden yellow foliage. It retains its color the entire season and is valuable for creating pleasing and striking contrasts with both green and purple-leaved shrubs.

Lemoine's Erect (*P. Lemoinei erectus*). A charming variety of upright growth; flowers



CALIFORNIA PRIVETT (See Page 65)

small, yellowish white, fragrant, more clustered than the older sorts, completely covering the bush.

Van Houtte's (*P. Van Houttei*). Red. One of the best red varieties.

SWEET-SCENTED SHRUB. See *Calycanthus*.

TAMARIX. *Tamarisk*

African (*T. Africana*). A very beautiful shrub, with very fine, feathery foliage somewhat like the Juniper. This sort has light pink flowers in small racemes, which appear toward the close of May or the first of June. A valuable shrub for near the seashore or in sandy soils where others do not do well. They thrive in the very spray of the salt water.

WEIGELA. *Diervilla*

Candida (*D. candida*). This is the very best of all the white-flowering Weigelas. A strong, upright, erect grower; flowers pure white and produced in great profusion in June and continue to bloom during the entire summer. One of the most satisfactory shrubs.

Rose-colored (*D. rosea*). An elegant shrub, with fine, rose-colored leaves. Introduced from China by Mr. Fortune and considered one of the finest plants he has discovered. Quite hardy. Blossoms in May.

Variegated-leaved (*D. nana foliis variegata*). Leaves bordered with yellowish white, finely marked. Flowers bright pink, and borne in great profusion.



SNOWBALL (See Page 65)

EVERGREEN SHRUBS

Adam's Needle. See Yucca.

ASHBERRY. Mahonia

Holly-leaved (*M. Aquifolium*). A beautiful shrub, with smooth shining leaves, covered with bright yellow flowers in spring and a profusion of blue berries in autumn.

HOLLY. Ilex

American (*I. opaca*). Oregon grape, deep green, glossy leaves with scattered spiny teeth; bright red berries.

Ligustrum. See Privet.

Mahonia. See Ashberry.

Oregon Grape. See American Holly.

Privet. See Deciduous Shrubs.

YUCCA

Spanish Bayonet, or Adam's Needle

Has a fine appearance; the stem is two feet above the ground, covered with large bell-shaped flowers on laterals, forming a perfect pyramid; valuable for rock work. We list two varieties.

Aloifolia. Slender, simple trunk; dagger-shaped leaves 1 to 2 inches wide; very stiff; flowers white, often tinged with green or purple; panicle compact, close to leaves.

Filamentosa. The well-known garden variety, thread-leaved, creamy white; 2 to 4 feet. The best known and most largely planted of the Yuccas. July.

HEDGES

Nothing could be more beautiful than a neatly trimmed hedge of evergreens, and they are useful for boundary fences, screens, etc. We give below some of the best varieties for ornamental hedges, screens, windbreaks or boundaries.

	Page	Privet (Deciduous)	Page
Honey Locust (Deciduous)	55		
Japan Quince (Deciduous)	65		
Barberry (Deciduous)	65		
		Honey Locust	55

DEFENSIVE HEDGES

All described in appropriate places in this catalogue; make beautiful ornamental hedges.

HARDY CLIMBING VINES

"It seems unnecessary to speak at length of the value of the climbing plants in our gardens and pleasure grounds. They are equally ornamental on the walls and terraces of the stable, mansion and on the humblest cottage, over whose low roofs a mantle of rose or clematis sheds such a transforming cloud of beauty. They grace the garden walls and take from stiff and hard lines their ugliness by fresh foliage, pretty flowers and often, pleasing fruit." Invaluable for covering trellises, walls, cottages, etc.

AMPELOPSIS

Veitchii (Japan Ivy, or Boston Ivy). A beautiful, hardy climbing plant, of Japanese origin. Leaves a little smaller and more ivy-like than the American. This is one of the finest climbers we have for covering walls, as it clings firmly to the smoothest surface, covering it smoothly with over-lapping leaves, which form a perfect mass of foliage. The color is a fresh deep green in summer, changing to the brightest shade of crimson and yellow in autumn. It is quite hardy and becomes more popular every year. For covering walls, stumps, etc., no plant is more beautiful.

Quinquefolia (Virginia Creeper, or American Ivy). A native vine of rapid growth, with large, luxurious foliage, which, in the autumn, assumes the most gorgeous and magnificent coloring, the blossoms which are in-



SPIREA VAN HOUTTEI (See Page 66)

conspicuous, are succeeded by handsome dark blue berries. Like the bignonia and ivy, it throws out tendrils at the joints, by which it fastens itself to anything it touches.



AMPELOPSIS (See Page 68).

CLEMATIS. Virgin's Bower

Clematis plants of the improved sorts are exceedingly hardy, slender-branched, climbing shrubs of marvelously rapid growth and handsome foliage, which produce beautiful large flowers of various colors in great abundance, and during a long period. In the several species and varieties of it, the Clematis surpasses all other hardy climbers in its adaptation to many uses and locations. They do best in a rich soil, in a sunny situation.

Henryi. This is the finest of all white Clematises, and should find a place in every collection. It is not only a vigorous grower, but is a remarkably free and continuous bloomer, beginning with the earliest and holding on with the latest. Flowers large, beautiful creamy white, with reddish chocolate anthers. Art cannot produce a picture corresponding in any degree to the wealth of beauty found in the flowers of this variety. Especially desirable. June to October.

Jackmani. This is, perhaps, the best known of the fine perpetual Clematises, and should have credit for the great popularity now attending this family of beautiful climbers. The plant is free in its form of growth, and an abundant and successful bloomer, producing flowers until frozen up. The flowers are large, of an intense violet-purple, remarkable for its velvety richness. Introduced in 1862—since which time many new varieties have been brought forward—Jackmani has no superior, and very few, if any equals. July to October.

Madame Edouard Andre. This is the nearest approach to a bright red Clematis, and has been called the *Crimson Jackmani*. The plant is a strong, vigorous grower and very free in bloom. Color a distinct crimson-red; a very pleasing shade and entirely distinct from all other varieties.

Paniculata (Sweet-scented Japan Clematis). A Japanese plant possessing unusually attractive merits. A vine of very rapid growth, quickly covering trellises and arbors with handsome, clean, glossy green foliage. The flowers are of medium size, pure white, borne in immense sheets, and of a most delicious and penetrating fragrance. The flowers appear in September, at a season when very few other vines are in blossom.

HONEYSUCKLE. Lonicera

Chinese Twining (*L. Japonica*, or *L. Sinensis*). A well known vine, holding its foliage nearly all winter. Blooms in July and September; very sweet.

Hall's Japan (*L. Halliana*). A strong, vigorous evergreen variety, with pure white flowers, changing to yellow. Very fragrant. Covered with flowers from June to November.

Monthly Fragrant (*L. Belgica*). Blossoms all summer; flowers red and yellow; very sweet. Rapid grower.

Scarlet Trumpet (*L. sempervirens*). A strong grower, and produces bright scarlet, inodorous flowers all summer.

See also Upright Honeysuckle.

IVY. *Hedera*

Evergreen Ivies often suffer in winter if exposed to the sun, and should therefore be planted on the north side of a wall or building. **American.** See *Ampelopsis*.

English (*H. Helix*). A well known old and popular sort.

JASMINE. *Jasminum*

Hardy Yellow (*J. nudiflorum*). Bright yellow, fragrant blossoms.

Hardy White (*J. officinalis*). Very sweet-scented and highly desirable.

WISTARIA

Chinese Purple (*W. Sinensis*). A most beautiful climber of rapid growth and producing long, pendulous clusters of pale blue flowers. When well established, makes an enormous growth. It is very hardy and one of the most superb vines ever introduced.

Chinese White (*W. Sinensis alba*). Introduced by Mr. Fortune, from China, and regarded as one of the greatest acquisitions. Rather tender.

BULBOUS AND TUBEROUS-ROOTED PLANTS

PAEONIES

Cream, White, Red, Pink, Purple

Herbaceous. This splendid class contains the largest, most showy and attractive flowers in cultivation, almost rivaling the rose in color and blossom, and it is to be regretted



CLEMATIS PANICULATA (See Page 69).

that they have been so much neglected. They are of stately growth, very hardy and delightful when in blossom. At the present time the public is beginning to appreciate the many fine varieties of recent introduction,

ranging from pure white through the different shades of pink, rose, variegated, purple, white, etc. They increase in beauty with age and may be planted in almost any situation. We recommend fall planting. They succeed best in rich soil and will be benefited by a good fall plant-manure during the winter, which may be lightly spaded into the soil in the spring. Many of them are very double and have



PAEONIES.

PAEONIES Continued

a delicate and refreshing fragrance. They are easily cultivated and require but little protection. Blossoms from 4 to 8 inches in diameter. Foliage rich, glossy, deep green color.

Moutan (Tree Peony). Handsome flowering shrub, attaining a height of 4 to 6 feet with proper care. The flowers are remarkably striking, of gorgeous colors and enormous in size, often 6 to 8 inches across. Very effective amongst shrubs or in borders.



HALL'S JAPAN HONEYSUCKLE (See Page 70).

CANNA

Indian Shot Plant. Stately and highly ornamental plants, for both flowers and foliage. They attain a height of 2 to 5 feet and may be grown singly or in masses. Leaves green or brownish red; flowers scarlet, crimson, yellow, cream, etc., variously marked.

CROCUS

A universal favorite and one of the earliest garden ornaments. Should be planted about 2 inches deep. Colors blue, white, yellow and striped.

DAHLIAS. White, Red, Pink

There is nothing that, with the same amount of money invested, will give more show of flowers than Dahlias. We offer dry bulbs or tubers. Especially fine for borders. Large assortment of colors.

GLADIOLUS

The Gladiolus is the most attractive of all the summer flowering bulbs and deserves a place in every garden, as it is sure to flower and do well with very little care. Set the bulbs from 6 to 9 inches apart and about 4 inches deep. Plant from middle of March to first of June. It is a good way to plant two or three different times, ten days or two weeks apart. This will give a succession of blossoms from July to November.

HYACINTHS

The most beautiful and fragrant of early spring-flowering bulbs, much used for winter forcing. Too well known to need description. Large assortment of colors and varieties.

IRIS

Germanica (German Iris). The true "Fleur de Lis," the national flower of France. They are perfectly hardy, thrive anywhere, grow and blossom luxuriantly, particularly if plentifully supplied with water or if planted in moist situations, as on banks of ponds, etc. Plants well established produce from 50 to 100 spikes of bloom, deliciously fragrant and fine for cutting. In beauty the flowers rival the finest orchids, colors ranging through richest yellows, intense purples, delicate blues, soft mauves, beautiful claret-reds, white, primrose and bronzes of every imaginable shade.

Kaempferi (Japan Iris). Finest of all the Iris family. The flowers are of immense size, from 6 to 8 inches in diameter, and of the most beautiful and delicate shades. They are perfectly hardy, and flower in great profusion

during June and July. A well established plant gives a dozen or more flower stalks 2 to 3 feet high, each stalk producing 2 to 4 enormous blooms. The Iris thrives best if planted in a moist soil; if this cannot be had, should be plentifully supplied with water while growing and flowering.

JONQUILS. Narcissi

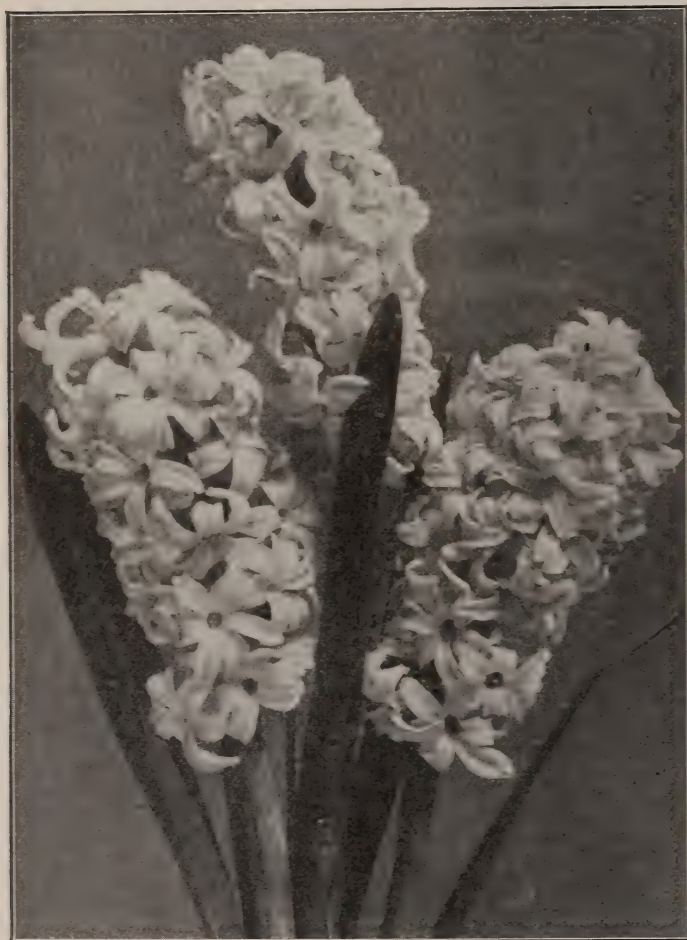
Pretty varieties of the Narcissus, having a very agreeable fragrance; adapted to either pots or outdoor culture. The bulbs being small, six or eight may be put in a 6-inch pot.

LILY OF THE VALLEY**(Convallaria majalis)**

The Lily of the Valley is as hardy as any plant can possibly be, and when planted in the open ground will increase rapidly. For the house we have what are called "pips"—young roots, with flowering stems, that will bloom in a few weeks after planting, and will flower well in baskets of damp moss, or potted. For the garden we can ship either in the spring or autumn.

LILIES. Liliun

No class of plants capable of being cultivated out of doors possesses so many charms; rich and varied in color, stately and handsome in habit, profuse in variety, and of delicious fragrance, they stand prominently out from all



HYACINTH (See Page 71.)

other hardy plants. They thrive best in a dry, rich, well-drained soil where water will not stand in winter. After planting they require very little care, and should not be disturbed for several years; established plants blossom more freely than if taken up annually.

Auratum (Gold-banded Lily of Japan). Flowers very large, of a delicate ivory-white color, thickly dotted with rich chocolate crimson spots, with a bright golden band through the center of each petal. The finest of all Lilies.

Harrisii (the Bermuda Easter Lily). Flowers large, trumpet-shaped, pure waxy white, gracefully formed and delightfully fragrant. The ease with which it can be forced into flower in winter has made it wonderfully popular as a winter flower. Tens of thousands of it are grown every year for church decorations at Easter.

Longiflorum. A well-known beautiful variety, with snow-white trumpet-shaped flowers that are very fragrant. It is quite hardy and blossoms freely in the open ground in June and July. Is also used largely for forcing for the Easter holidays; the flowers have more substance and last longer than the Bermuda Lily.

Tigrinum fl. pl. (Double Tiger Lily). Bright orange-scarlet, with dark spots; a strong-growing showy variety, and entirely hardy. Succeeds well everywhere.

Speciosum rubrum. White, beautifully spotted red; flowers in August. This is one of the most useful of the Lily family, perfectly hardy, and flowering well under all circumstances.

Speciosum album. Very fragrant, large flowers; pure white, with a green band running through the center of each petal. One of the best.

NARCISSI

We have a choice collection of these fragrant winter-blooming plants.

TIGRIDIA

One of the most showy of all summer bulbs, and blooms from mid-summer until frost, growing 3 feet high, with large wide-open triangular blooms, 4 to 6 inches across. The colors and markings are very brilliant and peculiarly odd and attractive, and clumps of them in the border have a most gorgeous effect. It is difficult to name a flower of such unique and exquisite beauty as a Tigridia, the superb spotting being so distinctive and handsome. They are easily grown and always more than satisfactory.

TUBEROSE**(Polyanthus tuberosa)**

These deliciously fragrant, white, wax-like plants should be in every garden. This variety is particularly adapted to their successful culture.

TULIPS

Owing to the late spring frosts in the colder sections, bedding plants cannot safely be planted in such localities before the early spring-flowering bulbs are through blossoming. Without these bulbs, for one or two months of beautiful spring weather, our gardens would present a bare appearance. We know of nothing that for the money invested will give a more gorgeous show during early spring, and there is nothing more easily grown than the Tulip. They thrive well in almost any soil. Should be planted in October and November.

ROSES

Roses are the most beautiful of flowers and are among the easiest to raise in perfection. We have given great care and attention to their culture and are constantly adding new varieties and dropping old ones that for any reason do not give satisfaction. We try to keep up to date and always test them before placing them before the public, as many varieties are not worthy of general distribution. They require plenty of manure and good cultivation. Old and decayed branches, and at least half the previous season's growth, should be cut away early each spring, and a little cutting back after the first blooming will insure more late flowers. Tea and Noisette Roses should be protected by covering them with evergreen boughs during the winter months, in cold sections.

Insects.—If the "thrip" or fly appears, syringe the plants daily with a strongly steeped solution of tobacco stems (one pound of stems to five gallons of water), or a solution of whale-oil soap (one pound of soap to eight gallons of water), until the insects are mastered. Rose bugs, which work at the flowers, must be picked off. The presence of the Rose caterpillar can be detected by its glueing two or more leaves together to form a shelter. These leaves should be promptly pressed together with the thumb and finger. Insects which eat the leaves can be destroyed by applying white hellebore when the foliage is damp. The secret of success in destroying all species of insects lies in applying the appropriate remedy as soon as the insects appear.



WISTARIA. (See Page 70).

HYBRID PERPETUALS or REMONTANTS

Of easy culture, adapted for garden or beds where hardy varieties are wanted. Although called perpetual, they are not so much so as the Teas, but bloom only at special times during summer and fall.

Alfred Colomb. Brilliant carmine-crimson; very large, full and of fine globular form. Extremely fragrant, and in all respects a fine sort.

American Beauty. Flowers very large, of beautiful form and very double; color a deep rich rose. The fragrance is delightful, resembling La France or the old-fashioned Damask Rose; it is truly an ever-bloomer, each shoot producing a bud.

Burbank (A perfectly hardy, new ever-blooming Bourbon Rose). This love-



JAPAN IRIS (See Page 71.)

ROSES—Continued

ly rose was raised by Mr. Luther Burbank, of California, known the world over as the "Wizard of Horticulture." The color is described as cherry-crimson—it is, in other words, the very deepest and brightest pink rose in cultivation. It is peculiarly adapted for both outdoor planting and for blooming in pots in the house during the winter. It is a strong, vigorous grower, making well-rounded bushy plants. The Burbank Rose is perfectly hardy, and will stand our most severe weather. The Burbank is, without doubt, the freest flowering Hybrid Perpetual Rose in cultivation. It commences to bloom when only a few inches high, and blooms throughout the season until stopped by freezing weather. The flowers are double, three inches across. The whole flower is most pleasing in its rich beauty, and is delightfully fragrant.

Captain Christy. Delicate flesh-colored rose in the center; a large, finely formed flower.

Clio. The finest flesh-colored Hybrid Perpetual. The flowers are simply perfection in form, with fine, broad petals, and are beautiful at all stages of development, from the



TULIP (See Page 72).



LILIES, HARRISII (See Page 72.)

small bud to the full open flower; color delicate satin blush, with a light shading of rosy pink at the center. Very free-blooming and strong, healthy grower.

Coquette des Alpes. White, tinged with carmine; very fine, a very free bloomer.

Coquette des Blanches. Pure white, very beautiful. We think this the best of the older pure white Hybrid Perpetuals.

Earl of Dufferin. A strong, healthy growing sort and a splendid autumn bloomer. Flowers large, very full and finely formed. Color deep velvety crimson, shaded with maroon.

General Jacqueminot. Brilliant velvety crimson; large showy and a fine grower; a magnificent variety.

General Washington. Scarlet-crimson; very large and fine; not quite so vigorous as General Jacqueminot.

Gloire de Lyonnaise. This is the nearest approach to a yellow in this class. A pale shade of salmon-yellow, with deeper center, changing to creamy white.

Harrison's Yellow. Golden yellow; medium size, semi-double. A freer bloomer than Persian.

Louis Van Houtte. Bright rose-carmine; full; very large; fine globular form; deliciously perfumed.

Mabel Morrison. Pure white petals, thick and waxy, a hybrid of Baroness Rothschild; habit good.

Magna Charta. A general favorite, prized on account of its strong, upright growth and bright, healthy foliage, as well as for its magnificent bloom. The color is beautiful bright pink, suffused with carmine.

Marchioness of Londonderry. A new hite Hybrid Perpetual, and one of the best flowers; of great size, measuring 7 inches across, perfectly formed and carried on stout stems. Color ivory white; petals of great substance, shell-shaped and re-flexed; free-flowering, highly perfumed; growth vigorous, and foliage very handsome. One of the finest roses. Awarded the gold medal of the National Rose Society of England. We have had this variety in flower for several seasons, and regard it as a decided acquisition to the list of hardy white roses. Requires some protection in winter in cold climates.

Margaret Dickson. Of magnificent form; white, with pale flesh center; petal very large, shell-shaped and of great substance; fragrant; a very promising variety; foliage very large, dark green.

Marshall P. Wilder. Color bright cherry carmine; fragrant; of good growth, with fine foliage. One of the freest of the Hybrid Perpetuals to bloom. We can recommend this rose without hesitation.

Mrs. John Laing. New. As a bedding rose this is undoubtedly one of the best varieties yet introduced, being hardly ever out of bloom all summer. Color a beautiful shade of delicate pink; of large size and very fragrant.



AMERICAN BEAUTY (See Page 73.)

It is also a good forcer from January onward.

Paul Neyron. Deep rose color; splendid foliage and habit, with large flower.

Persian Yellow. Bright yellow; small, nearly full. It is desirable to grow more than one plant, and by pruning one this year in the usual way, and the other plant the next year, annual crops of flowers may be had.

Prince Camille de Rohan. One of the darkest colored Roses; very dark velvety crimson, changing to intense maroon. There is no rose in all this collection that attracts more favorable comment than this one. A very prolific bloomer, and the blooms are of excellent form and size.

Soleil d'Or. New hardy yellow rose. The goal for which many of the world's greatest rose hybridizers have been striving has at last been reached, and we have a double-flowered yellow rose, hardy enough to withstand the winters of our northern states. Has blossomed all summer on the coast. Soleil d'Or is the result of a cross between Persian Yellow and Antoine Ducher, retaining many characteristics of Persian Yellow, the bark being much the same and foliage resembling that of its parent, but produced more plentifully, while in growth it is more branching and more vigorous. The flower is perfection in form with conical buds, expanding into a large and full globular flower, with incurved inner petals. The buds are a marvelous shade of rich chrome yellow, with just a tinting of coppery rose in the center. The fully expanded flower is beautiful in its blendings of orange yellow, reddish gold and nasturtium-red, forming a coloring impossible to satisfactorily describe. This grand seedling has been shown at all the large rose exhibitions



SOLEIL D'OR

in Europe and has received the highest awards possible to grant at every display.

HARDY CLIMBING ROSES

Baltimore Belle. Pale blush, nearly white, double. The best white climbing rose.

Crimson Rambler. Introduced from Japan, the land of wonders. Another season's trial fully justifies all the praise that has been given it in the past. During nearly the entire summer it has a mass of rich, glowing crimson, and every one who has it is delighted with it. Perfectly hardy; wonderfully free-flowering; intensely bright and vivid in color. Plant is a strong, robust grower, making shoots 10 to 12 feet long in a season when well established. The flowers are produced in long trusses and panicles, often measuring

be more desirable or beautiful. If grown in beds and pegged down it makes a brilliant display with its profusion of bloom, large clusters shooting out from each joint. As many as 300 blooms have been counted on a single branch.

Dorothy Perkins. New. This is a splendid new, shell pink climbing rose. It attracted much attention at the Pan-American Exposition, where a bed of fourteen-months-old plants produced a show of bloom unequalled by any other variety unless it was the famous Crimson Rambler. This new rose is of the same strong habit of growth as Crimson Rambler, and the flowers are borne in clusters of 30 or 40 and sometimes even 50 to 60. The flowers are large for a rose of this class, very double, sweet-scented and of a beautiful shell-pink, a color that is almost impossible to accurately represent by lithography. Raised from seed of Rosa Wichuraiana crossed with that grand old rose, Mme. Gabriel Luizet. Absolutely hardy. Mr. Wm. Scott, the assistant superintendent of horticulture at the Pan-American, says regarding Dorothy Perkins: "This has exactly the habit of the well-known Crimson Rambler. It has flowered splendidly and been very brilliant. This seems to me to be a great acquisition and I believe it to be a good forcing rose. The individual flower is larger than the Crimson Rambler, but it is a beautiful shell-pink in color."

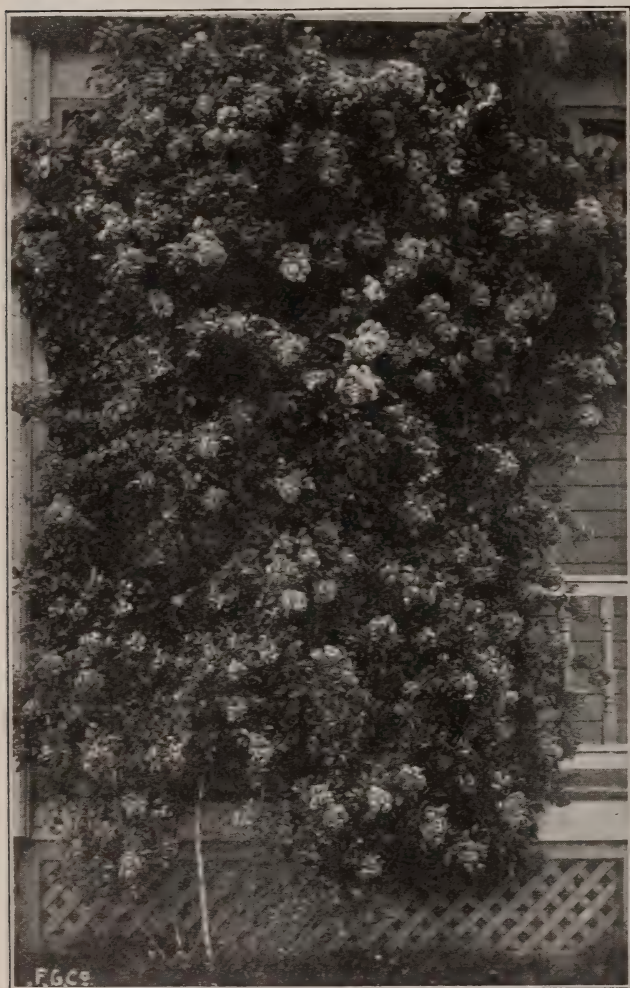
Empress of China. A very hardy, free-flowering climbing rose, of good size, blooming in clusters; bright pink flowers; very attractive. It is practically ever-blooming, for on good-sized plants, when well established in the ground, flowers may be expected the whole season.

Pink Rambler (Euphrosyne). What is said of White Rambler applies equally to this, except the color of the flowers is pure shiny rose—the partially open buds being bright, light carmine, thus producing a strong and pleasing contrast. The flowers often change to creamy white when fully matured. The numerous yellow stamens lend an additional charm to the flower. In hardiness, freedom of bloom, form and color of flowers and vigorous climbing habit, this variety is fully the equal of Crimson Rambler.

Rubin. New. Another acquisition resembling the Crimson Rambler, but having larger flowers of a deep red or ruby color. Very attractive.

White Rambler (Thalia). A worthy companion for the Crimson Rambler. In habit of growth, foliage, manner of blooming and shape of flower, this is identical with crimson Rambler, differing only in color, which in Thalia is pure, clear white. Flowers quite fragrant and last for a long time after cutting.

Yellow Rambler (Aglaia). The only yellow, hardy climbing rose. It has been thoroughly



CRIMSON RAMBLER.

8 or 9 inches long and 6 or 8 inches across, pyramidal in shape, often 35 to 40 in a cluster, fairly covering the plant from the ground to the top with a mass of bright, glowing crimson. The color is simply superb and is retained unfaded or without showing any of the purplish tinge so often seen in dark roses, for an unusual length of time. For walls, pillars and porches, or any other place where a hardy climbing rose is wanted, nothing can

HARDY CLIMBING ROSES—Cont.

tested and found to successfully withstand, without protection, a continued temperature of zero and below. It is similar to Crimson Rambler in manner of blooming, the flowers being in immense clusters and having the same lasting qualities, remaining in bloom three to four weeks. The plant is even freer in growth than Crimson Rambler and soon makes a fine, showy specimen.

MOSS ROSES

Strong, vigorous growers, much admired for moss-covered buds; hardy. Most varieties bloom but once in a season, but remain for a long time and are very handsome.

Crested. Deep pink buds, surrounded with mossy fringe. Very beautiful and free from mildew.

Glory of Mosses. A moderate grower. Flowers very large, appearing to best advantage when full; color pale rose.

Perpetual White. Pure white. Prod few flowers.

White Bath. White, sometimes tinged with flesh; attractive in bud and open flower. The best white Moss Rose. Budded plants.



MOSS ROSE.

HYBRID TEA ROSES

A most beautiful class of half-hardy roses, combining to some extent the hardiness of the Hybrid Perpetual with the free-blooming qualities and bright colors of the Teas and Noisettes. Hybrid Noisettes should be in every collection, as they are among the best ever-blooming varieties.

La France. Delicate silvery rose; very large and full; an almost constant bloomer, equal in delicacy to a Tea Rose; the most pleasing fragrance of all roses. Only a moderate grower.

Madame Caroline Testout. It is clear pink in color—there is nothing in the rose line that can approach it in color—and the flower is as large as Baroness Rothschild and as free as La France. If our judgment is not mistaken, it will make a sensation in the cut flower market when brought in in good shape, and will command such prices that it will be a most profitable rose to grow.

Meteor. As a dark crimson perpetual-blooming rose this ranks as one of the best yet introduced of any class. It is especially valuable for summer and fall, blooming either in the greenhouse or in open ground, and where there is a demand for fine roses in summer, this variety will become a great favorite.

Mrs. Robert Garrett. A beautiful large rose of exquisite shape, finish and blending of colors. It was raised by Mr. John Cook, of Baltimore, Md., the result of a cross between



PAUL NEYRON (See Page 75).

TEA ROSES—Continued

Testout. It partakes largely of the latter variety in habit of growth, in foliage, spines and stems, and in shape of flowers shows a complete blending of both parents. The flowers are very large, on strong stems, clothed with clean, heavy foliage and strong spines. The buds are long and pointed in shape, and open up beautifully into a full, rounded flower. In shape of bud and a half-open flower it very

pink, almost light enough to be called a shell-pink."

White La France (Augustine Guinoiseau). This beautiful variety, with flowers of pure white, shading to a center of light rose, is a great favorite on account of its great freedom of bloom, fragrance and large flowers. A vigorous grower, producing a great number of buds and flowers; excellent for planting in cemeteries. Small plants.

GENERAL COLLECTION OF TEA, NOISSETTE AND EVER- BLOOMING ROSES

Tea Roses are among the most important on account of free blooming, fragrance and delicate colors and fine form. The most popular sort where they can be grown. Not very hardy and require more care and attention.

Noisette, mostly vigorous climbers; bright green foliage; delicate tinted flowers which have a tendency to grow in clusters.

Bride. An ever-blooming pure white Tea Rose, of large size and most perfect form. The buds are pointed and the ends of the petals are slightly curved back. It is a very free-blooming variety, and has the most delicious tea fragrance.

Bridesmaid. In this exquisite new Tea Rose we have an improved Catherine Mermet, from which it is a sport. Mermet, on account of its exquisite shape, large, solid, firm buds, with long, stiff stems, has long been considered one of the best cut-flower varieties; its only defect has been that in dark, cloudy weather it becomes a washy dull color. Bridesmaid, at all seasons, is a clear, delicate pink, in all respects a counterpart of Mermet, with large, handsome, pointed buds on long, stiff stems.

Etoile de Lyon. This is considered one of the finest yellow bedding roses for outside planting. It is, moreover, one of the hardiest in the Tea section. It blooms freely, and every flower is a gem. It equals Marechal Niel in size; on strong bushes. Very sweet-scented; the color is a rich golden yellow.

Franz Deegan (New Forcing Rose). A seedling from Kaiserin. This beautiful yellow Hybrid Tea is a fine grower, having dark leathery foliage and the good habit of throwing up numerous heavy canes, each one



LA FRANCE (See Page 77).

much resembles Souvenir du President Carnot, but is very much larger; color a glowing shell-pink, very deep in the center; the fragrance is delicate and pleasing. A correspondent of the "American Florist," in commenting on this rose last March, says: "The exhibit of Mr. Cook was a departure from the rest, as it was a vase of roses. But such roses! They towered above the carnations on strong stems clothed with heavy foliage, and were as large as American Beauties, but of a beautiful clear

TEA ROSES—Continued

crowned by a glorious flower of large size. Composed of large petals; the outer petals are of about the color of *Perle des Jardins*; the inner petals a good orange shade, very deep and rich. It is a constant bloomer, opening its buds freely. A strong, healthy grower, not subject to mildew. This is a very promising variety for forcing.

Golden Gate. This is another grand new rose of surpassing beauty. The buds and flowers are of beautiful form, extra large size, resembling very much in shape and size that grand old variety, *Niphetos*. Ground color creamy white, beautifully tinged with golden yellow and bordered with clear rose.

Gruss an Teplitz. As a bedding rose this is one of the finest and most useful varieties ever sent out. It will take rank with *Hermosa* or *Souper*. The color is brightest scarlet, shading to deep, rich, velvety crimson. It is very fragrant, the freest grower and most profuse bloomer of any ever-bloomer. The mass of color produced is wonderful, and the foliage is extremely beautiful, all the younger growth being a bronzy plum color. A queen among scarlet bedders. It is a perfect sheet of richest crimson-scarlet all summer. It will undoubtedly supersede *Agrippina*, *Queen's Scarlet* and others of this class.

Helen Gould, or Balduin. Claimed by the introducers of *Helen Gould* to be a different rose from *Balduin*. While the identity of this rose is in dispute, it has proved so satisfactory with us that we have planted it largely. This is probably the most beautiful and satisfactory rose for general planting ever introduced in America. It has proved itself to be the strongest growing, freest blooming, largest flowering and hardiest rose in existence. It is a better rose for general planting than *American Beauty*—the dream and hope of every rose-grower for years past. The flowers are full and perfectly double, the buds beautifully made, long and pointed. The color is a warm, rosy crimson, like the color of a ripe red watermelon. It is as hardy as *La France*, and one of the best, if not the very best, roses, for winter blooming.

Hermosa (Bengal). Always in bloom and always beautiful. The flower is cupped, finely formed and full; color the most pleasing shade of pink, very fragrant. A favorite with every one.

Kaiserin Augusta Victoria. A beautiful rose, with elegant, large-pointed buds and very large, full double flowers; color delicate creamy white, deliciously fragrant. The plant is a strong, healthy grower and constant bloomer. The flowers are on strong, stiff stems, with rich, glossy foliage, making it one of the finest roses for corsage wear or any other use to which cut flowers can be put.

Mad. Hoste. Ivory-white, changing during the heat of midsummer to canary-yellow, with amber center; a strong, healthy grower and very free bloomer. Flowers and buds of large size and can always be cut with long stems. Highly prized for cut flowers on account of its superb buds and long stems. One of the finest for bedding out, or for forcing for winter flowers.

Maman Cochet. In bud it resembles the *Mermet* family, being long and shapely, borne on long, stiff stems. It is of the largest size, and the flower is built up or rounded, and very double. The color is a deep rose pink, the inner sides of the petals being a silver rose, shaded and touched with golden yellow. We pronounce this the finest rose by far that has been introduced from France in



BRIDESMAID (See Page 78).

the past five years. We can with full confidence recommend this rose.

Maman Cochet, White, or Priscilla. The charming new white Tea Rose. Another new American rose. It belongs to the Tea class, being a child of that grandest of bedding or outdoor roses, *Maman Cochet*. Its habit is exceedingly strong and upright, like its parent, and it possesses the same large, beautiful, healthy foliage, and is a most profuse and constant bloomer. The flowers are of enormous size, remarkably round and full,

TEA ROSES—Continued

pure, clear, snowy white throughout, and are delightfully tea-scented. It is by far the finest and most reliable white bedding rose yet produced. Any one can have the very finest roses for cutting all summer and autumn by planting a few bushes of it. It is without doubt the largest white rose, both in bud and flower.

Papa Gontier. A grand red Tea, of fine, crimson shade and silken texture (as distinct from velvety texture). The bud is of fine

in England, and taken first honors wherever shown. In close bud form it shows the high, brilliant colors seen only in the Austrian Copper Rose, scarlet and yellow. As it opens the colors deepen, the scarlet turning darker red, the yellow to orange and copper, the inside of the petal golden yellow. The open rose is large, perfectly double and of grand form. The foliage is glossy and thick, the new growth being the darkest and most beautiful found among roses. The form and color of bud, its freedom of growth and bloom will give Sunrise a high place among forcing roses. A novelty is earnestly wished for by cut-flower growers, and here is a novelty of the highest quality.

Sunset. The flowers are of large size, fine, full form, very double and deliciously perfumed. Color is a remarkable shade of rich golden amber, elegantly tinged and shaded with deep ruddy copper.



GENERAL JACQUEMINOT (See Page 74.)

size and graceful form, on good length stem, desirable for cut flowers.

Perle des Jardins. Fine straw-yellow, sometimes deep canary-yellow; very large and full, and of the most perfect form; one of the finest roses grown; steps at once into fame as the finest dwarf yellow rose we have; distinct from all other Tea Roses. Probably better known than any other yellow rose.

Safrano. Bright apricot-yellow, changing to orange and fawn, sometimes tinted with rose; valued highly for its beautiful buds; fragrant.

Sunrise. The most gorgeous rose of its class yet introduced. This has made a sensation

CLIMBING TEA AND NOISETTE ROSES

Gloire de Dijon. A combination of salmon, orange and buff; flowers large and of good globular form. Hardy.

Kaiserin (Climbing). See Mrs. Robert Peary.

Marechal Niel. Beautiful deep yellow; large, full and globular form. Very sweet.

Meteor (Climbing). This rose has gained a world-wide reputation as the finest crimson ever-bloom-

ing climbing rose in cultivation. It is a rich, velvety crimson, much like the forcing rose Meteor, of which it is a sport. An extremely strong-growing variety, making shoots 12 to 15 feet long in a single season under favorable circumstances. South of the Ohio river it would be perfectly hardy, while in the extreme North it could be laid on the ground and covered with leaves or straw.

Mrs. Robert Peary (Climbing Kaiserin Augusta Victoria). A sport from that grand hardy ever-blooming rose, Kaiserin Augusta Victoria. It has the same beautiful creamy white flowers and splendidly shaped buds and, in addition, has a remarkably strong climbing habit of growth, sending up shoots 10 to 12 feet high.

CLIMBING TEA ROSES—Continued

Reve d'Or. One of the grandest climbing roses. A splendid robust climber, with the very best of foliage. A good plant will soon go to the top of a two-story house and cover space proportionately large the other way. Such a plant in full bloom, with its graceful flowers of delicate coloring, is a charming sight. Color apricot-yellow, with orange and fawn tints; petals of superb and delicate texture; flowers moderately full, always pretty and graceful, whether in bud or full open; a very profuse bloomer.

Wm. Allen Richardson. Orange-yellow center coppery yellow. Very rich.

TREE ROSES

The Tree Roses are grafted on hardy rose stalks 4 to 5 feet high, are tree-shaped and when in full bloom are objects of beauty, making handsome plants for the lawn or rose border. In this shape we offer only the Hybrid Perpetual or hardy class. We have them in white, the different shades of pink, red and crimson.



GRUS AN TEPLITZ (See Page 73.)

SHASTA DAISIES

(*Chrysanthemum Leucanthemum Hybridum*)



SHASTA DAISIES.

Originated by Luther Burbank, from whom we secured our supply. Too well advertised by this time to need any long description. A marvelous combination of size, grace, abundance and general effectiveness of flowers, which are borne on long, clean, strong stems; flowers snowy white or cream colored, 4 or 5 inches across.

Alaska. (New). The whole plant, roots, stems, leaves, buds and flowers are gigantic, but compact and graceful in every respect. The marvelous combination of size, grace, glistening whiteness, abundance and general effectiveness of the flowers, which are borne on long, clean, strong stems, will place it at once far ahead of all others of its class.

Under the ordinary field cultivation given *Chrysanthemums*, the flowers average $4\frac{1}{2}$ to 5 inches across on stems 2 or 3 feet long, with 38 to 42 wide petals and a very small disc; with proper disbudding are produced perpetually, though more abundantly at the usual blooming season.

California. (New). Another giant in growth, and in most respects similar to Alaska, but the buds and half-opened flowers are of a most pleasing clear, pale lemon-yellow, with two rows of petals. When a day or two old these gradually change to pure white. The combination is exceedingly pleasing. The flowers average 4 to 5 inches across, and, with ordinary care, are produced perpetually. The common

SHASTA DAISIES—Continued

varieties of *Chrysanthemum maximum* are as weeds when compared with these.

Westralia (New). This is distinguished by its branching habit, which is a strong characteristic in one of the parents of the whole Shasta Daisy family—the Japanese Field

Daisy (*Chrysanthemum Leucanthemum Nipponicum*).

Well-grown plants are 3 to 4 feet high and nearly as much through; buds and newly opened flowers are of a pleasing cream-color, semi double, 3 to 4 inches across, and are produced on fairly long stems in bewildering profusion.



DAHLIAS (See Page 71).

See also 4-page "Shasta" Daisy Circular.

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HT, Hybrid Tea and Hybrid China. T, Tea.

N, Noisette. CL, Climbing.

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WASHINGTON STATE SPRAYING CALENDAR

(This applies broadly to all portions of the Northwest, hence we reprint verbatim.—WASHINGTON NURSERY COMPANY.)

Revised by R. Kent Beattie, Botanist, and A. L. Melander, Entomologist, of the Washington State College at Pullman.

Insect or Disease	Plant Attacked	What to Spray With	First Spraying	NOTES
1 Codling Moth	Apple, Pear	Arsenate of lead	While the last blossoms are falling. Spray with force directly into every flower. Use a Bordeaux nozzle.	Repeat one week later in the same way. If necessary a third time four weeks after the first worms appear under the bands, and a fourth four weeks later.
2 San Jose Scale	Nearly all deciduous trees..	Sulphur-lime wash	In the spring before the buds burst.	After the eggs under the scales hatch (May 15 to June 15) spraying with kerosene emulsion, 1 part to 10 parts water, or whale-oil soap, 1 lb. to 5 gals. water, is effective.
3 Oyster Shell Bark Louse	Apple, mainly	Sulphur-lime wash	When the leaves are off the trees..	Arsenate of lead may be used in the summer when the worms appear.
4 Peach Worm or Twig Borer	Peach, sometimes Plum, Apple and Cherry	Sulphur-lime wash	Just as the buds swell in spring....	Or arsenate of lead just as the buds open in the spring. Repeat in one week.
5 Bud Moth	All orchard trees	Sulphur-lime wash	Just as the buds are swelling.....	Kerosene emulsion is effective when insects appear. Repeat before the leaves curl if necessary. Cutting off twigs covered with eggs in winter usually suffices for young trees.
6 Green Aphis	Apple, Plum, Prune	Sulphur-lime wash	When the leaves are off the trees..	For the root form, when present, remove the soil and treat with finely ground tobacco placed around base of tree; use 2 to 5 lbs. to a tree.
7 Black Aphis	Cherry and Peach	Kerosene emulsion or whale oil soap	When the insects appear and before they curl the leaves.....	Repeat if necessary.
8 Woolly Aphis	Apple	Kerosene emulsion, 1 part to 12 parts water.....	When the insects appear	Make dust of 1 part paris green, 25 parts bran or flour. Repeat if necessary.
9 Aphis	Hop, rose, house plants, etc.	Whale oil and quassia....	When the insects appear	Or dust with lime, road dust or ashes.
10 Cabbage Worm	Cabbage, Cauliflower	Paris green dust	Before the worms eat into cabbage.	This will kill the winter eggs. If the mite appears in summer, use kerosene emulsion, best adding 1 oz. of sulphur to the kerosene for each gallon of spray.
11 Cabbage Aphis	Turnip, Cabbage	Kerosene emulsion	Just as soon as the insects appear..	Dig out worms in fall and spring with a knife. During the growing season whitewash base of trunk.
12 Slug	Pear, Cherry	Arsenate of lead	When the insects appear	Dig out worms in fall and spring with a knife. During the growing season whitewash base of trunk.
13 Red Spider	Fruit trees and bushes	Sulphur-lime wash	When the leaves are off the tree...	Add more soap than the formula calls for. Repeat 10 to 12 days later if necessary.
14 Blister Mite	Pear Leaf	Sulphur-Lime Wash	When the leaves are off the tree...	Again while the last blossoms are falling. Use a vermorel nozzle. Do not drench the trees.
15 Peach Tree Borer	Peach, Prune	Again three weeks later.
16 Flathead Borer	Apple, mainly	Again just after blossoms fall. Spray a third time, just as fruit begins to ripen, with copper acetate, 8 oz. to 50 gals. water. Before first spraying, gather and burn mummified fruits. Thin green fruit till they are separate. Prune trees so as to admit much sunlight.
17 Cottony Scale	Pear, Currant, Poplar, etc..	Kerosene Emulsion.....	When insects become cottony (May)	
18 Scab	Apple, Pear	Bordeaux	Just before the blossoms open	
19 Blackspot Canker	Apple	Bordeaux, double strength.	Immediately after the leaves fall...	
20 Brown Rot or Fruit Mold	Plum, Cherry, Peach	Bordeaux	Just before the blossoms open	
21 Leaf Curl	Peach	Sulphur-Lime Wash	Just before the buds open.....	
22 Peach Mildew	Peach	Spur-lime wash	Before buds burst.....	

23 Gooseberry Mildew	Gooseberry
24 Scab	Potato
25 Potato Blight	Potato
26 Anthracnose	Bean
27 Smut	Wheat and Oats
28 Moss and Lichens	Fruit trees

Potassium sulphide, 1 oz. to 2 gal. water	Just as buds burst.....
Formalin, 1 lb. to 30 gal. water
Bordeaux	July first to fifteenth.....
Bordeaux	When plants are well started
Formalin, 1 lb. to 45 gal. water
Lye or sulphur-lime, double strength	When the leaves are off the trees..

Repeat at intervals of 10 days till fruit is picked.

Soak seed for two hours, then cut and plant. Do not plant in soil where scabby potatoes were grown. Again two weeks later. If blight is bad on unsprayed potatoes near by, follow with a third application two or three weeks later.

Again three weeks later. Follow with a third spraying three weeks later. Before planting seed reject all diseased ones.

Sprinkle the seed thoroughly; let it lie in a pile two hours; dry and plant with a clean seeder.

BORDEAUX MIXTURE

Bluestone	6 pounds
Good Lime	4 pounds
Water	50 gallons

Dissolve the bluestone by suspending it in a sack in 25 gallons of water in a barrel. Slake the lime in another vessel, adding water slowly to make 25 gallons of lime milk. Pour the two at the same time slowly into a third vessel, allowing them to mix thoroughly as they are poured in. Many orchardists now use only 4 pounds of bluestone to make this mixture.

If there is not enough lime in the water it will burn the foliage. To test this, take a saucer full of the mixture and add a few drops of a solution of yellow prussiate (ferrocyanide) of potash (one ounce to one-half pint of water). If a brown color appears, more lime must be added until no change takes place, when the test is applied. Even the best bordeaux may scorch the fruit if applied in rainy weather.

ARSENATE OF LEAD

Arsenate of lead.....	1 pound
Water	40 to 50 gallons

It is unnecessary to use it stronger. It is more reliable than paris green. It is espe-

cially useful where there is much rain. It sticks well and does not scorch the leaves.

SULPHUR-LIME WASH

Sulphur	12 pounds
Good Lime	12 pounds
Water	45 gallons

First slake the lime in the cooking vat. When slaked add the sulphur and about ten gallons of water, so that the mixture will boil easily.

Keep it well stirred until boiling begins. Boil until the sulphur is completely dissolved, which usually takes less than an hour. Then add the rest of the water, and the mixture is ready to spray. It should be poured into the spraying tank through a strainer. It may be hot or cold. Salt, which was formerly added to this mixture, is wholly unnecessary. There are several ready-made sulphur-lime washes which give good results when properly diluted.

WHALE OIL AND QUASSIA

Quassia chips	8 pounds
Whale oil soap.....	7 pounds

Soak the chips twelve hours in eight gallons of water. Dissolve the soap in boiling water. Strain the quassia extract to remove the chips, and add the soap solution. Stir thoroughly and dilute to make 100 gallons.

KEROSENE EMULSION

Kerosene	2 gallons
Whale oil soap.....	1/2 pound
Water	1 gallon

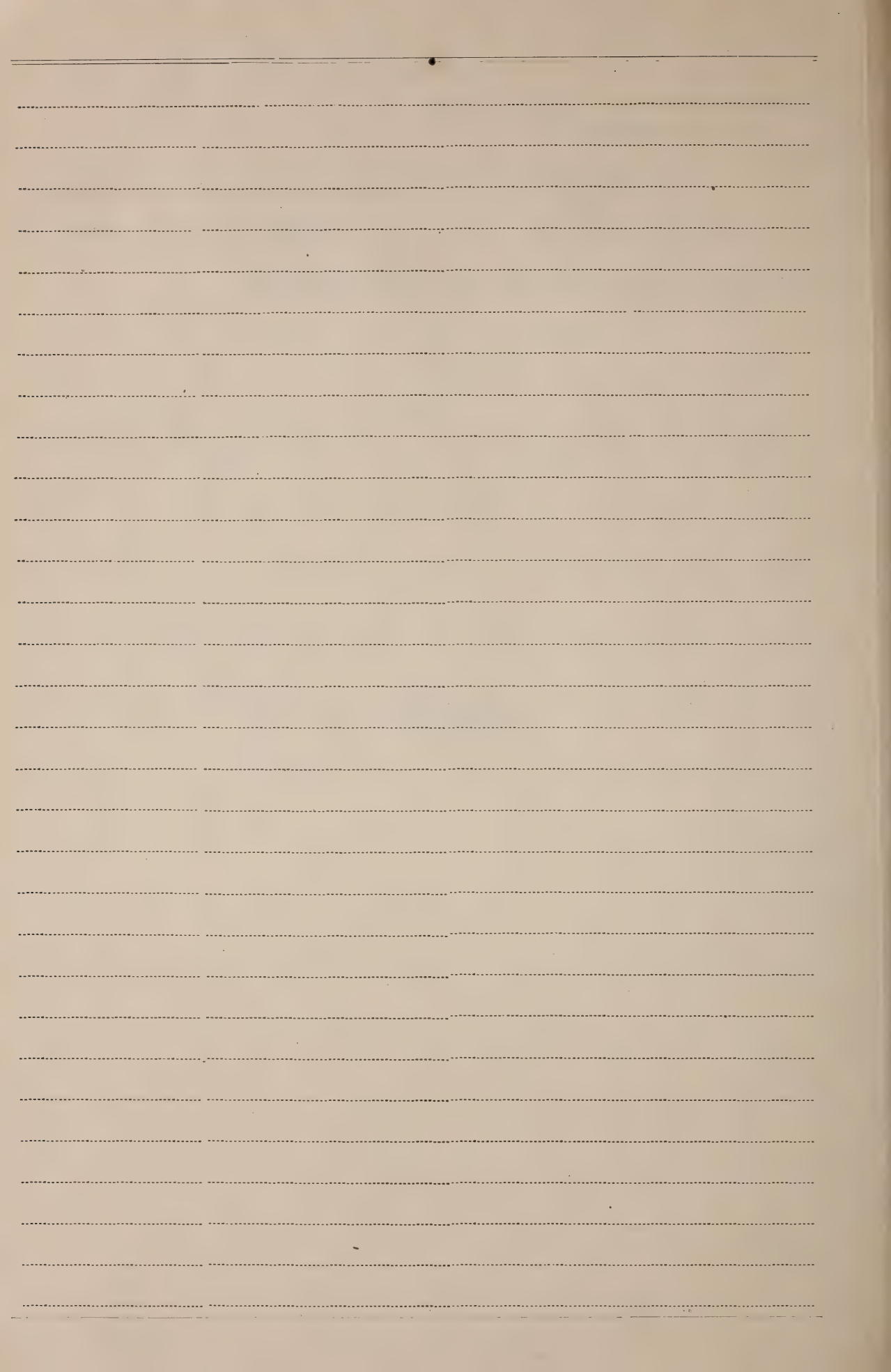
Dissolve the soap in the water by boiling, and add the suds boiling hot to the kerosene, away from the fire. The mixture is then to be agitated violently, preferably by pumping it back on itself with a force pump. After four or five minutes the mixture suddenly becomes creamy in consistence. If well made, the cream will stand for a long time without free oil rising to the surface. Unless otherwise stated, use one gallon of the emulsion to 12 gallons water in spraying. One quart soft soap or one pound laundry soap may be used instead of the whale oil soap.

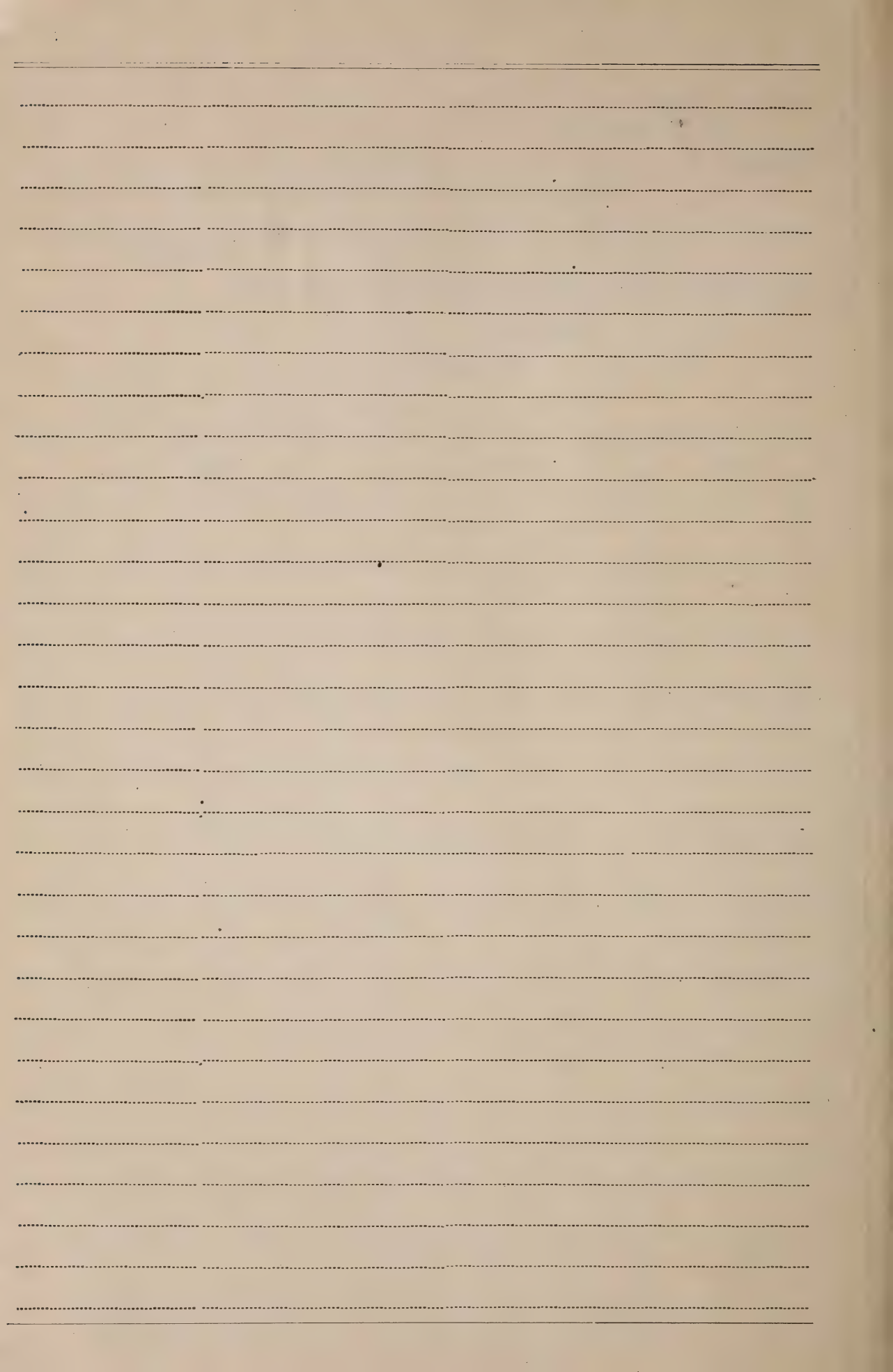
LYE

Lye (potash).....	1/2 pound
Water	10 gallons

Press of
THE FRUIT GROWER
ST. JOSEPH, MO.

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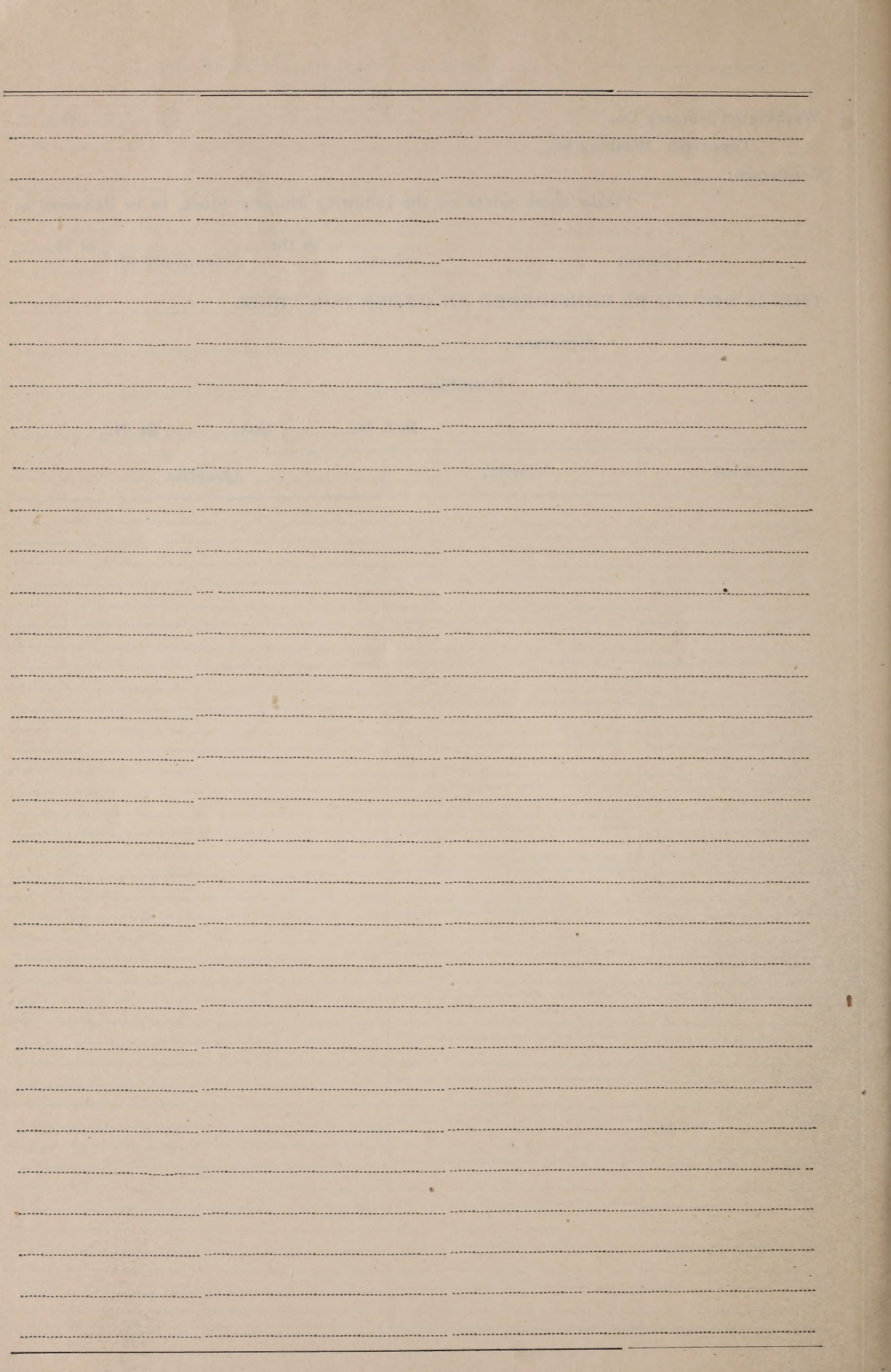
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